

180102

JPRS-EEI-84-051

3 May 1984



# East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

19980901 100  
001 100

DTIC QUALITY INSPECTED 2

**FBIS**

FOREIGN BROADCAST INFORMATION SERVICE

REPRODUCED BY  
NATIONAL TECHNICAL  
INFORMATION SERVICE  
U.S. DEPARTMENT OF COMMERCE  
SPRINGFIELD, VA. 22161

6  
72  
A64

#### NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

#### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

3 May 1984

**EAST EUROPE REPORT**  
**ECONOMIC AND INDUSTRIAL AFFAIRS**

**CONTENTS**

**INTERNATIONAL AFFAIRS**

**Briefs**

Soviet Electronics Minister Visits	1
GDR Deputy Culture Minister	1
Cooperation Talks With Egypt	1
Transit Gas Pipeline Accident	1

**CZECHOSLOVAKIA**

Incentive Systems Criticized as Nonmotivating (Anton Vavro; HOSPODARSKE NOVINY, 24 Feb 84) .....	2
Potac Views 1984 Plan for Economic, Social Development (Svatopluk Potac; PLANOVANE HOSPODARSTVI, No 1, 1984) .....	9
Energy Industry Results in 1983 Summarized (Miroslav Macel; HORNIK ENERGETIK, No 4, 1984) .....	20

**GERMAN DEMOCRATIC REPUBLIC**

Agricultural Production, Efficiency, Imports in FRG, GDR Compared (K. Merkel; FS-ANALYSEN, No 6, 1983) .....	25
---	----

**HUNGARY**

Functions of National Savings Bank Described (Jeno Szirmai; PENZUGYI SZEMLE, No 3, Mar 84) .....	42
---	----

**POLAND**

Poll Tests for Link Between Productivity, Work Force Shrinkage (Tadeusz Smuga; ZYCIE GOSPODARCZE, No 10, 4 Mar 84) .....	47
---	----

Foreign Trade, Affairs Ministries Report Personnel Changes  
(RYNKI ZAGRANICZNE, various dates) ..... 52

Enterprise, Diplomatic Assignments  
Director, Commercial Counsellor  
Foreign Trade Personnel  
Attaches, Other Personnel  
Foreign Trade, Diplomatic Personnel  
Foreign Trade Assignments  
Embassy, Foreign Trade Personnel

Specialist Discusses Water Shortage in Agriculture  
(Henryk Okruszko Interview; RZECZPOSPOLITA, 24 Feb 84) ... 60

YUGOSLAVIA

Data on Coal Production, 1981-1983; Outlook for 1984  
(PRIVREDNI PREGLED, 22 Mar 84) ..... 63

Briefs

Unemployment in Kosovo	67
Kosovo Economy's Losses	67
Economic Cooperation With Japan	67
Trade With GDR	67
Vojvodina Industrial Production	68
Kosovo Economic Results	68
Commodity Exchange With RSFSR	68

INTERNATIONAL AFFAIRS

BRIEFS

SOVIET ELECTRONICS MINISTER VISITS--Alexandr Shokin, minister of electronics industry of the Soviet Union, arrived in Budapest on 16 April at the invitation of Laszlo Kapolyi, minister of industry. He is having talks on the development of industrial cooperation between the two countries, and will pay a visit to the Microelectronic Enterprise, where the production of microelectronic components is developed with the help of Soviet technology. [Text] [AU221404 Budapest NEPSZABADSAG in Hungarian 17 Apr 84 p 8]

GDR DEPUTY CULTURE MINISTER--Klaus Hopcke, deputy cultural minister of the GDR, held talks in Hungary. He was received by Bela Kopeczi, minister of education. [Text] [AU221404 Budapest NEPSZABADSAG in Hungarian 17 Apr 84 p 8]

COOPERATION TALKS WITH EGYPT--Presided over by Istvan Torok, state secretary for foreign trade, and Dr Erfan Ali Safer [spelling as published], Egyptian state secretary for international investment and cooperation, the Mixed Hungarian-Egyptian Committee for Commerce and Economic Cooperation began its work in Budapest on 17 April. It will examine what possibilities are available in agricultural and industrial cooperation. [Text] [AU221404 Budapest NEPSZABADSAG in Hungarian 18 Apr 84 p 8]

TRANSIT GAS PIPELINE ACCIDENT--PAP correspondent Wlodzimierz Kaniewski has filed the following report from Prague: On 31 March in the vicinity of Prague an incident occurred in which localized damage was inflicted on the transit pipeline running through Czechoslovakia and supplying natural gas to, among other places, many West European countries. The gas leak was automatically detected by monitoring instruments in the transit gas pipeline control center in Prague. The burning plume of gas reached a height of half a kilometer. The fire was quickly contained and extinguished without any interruptions in the flow of gas through the pipeline. There was no damage to nearby structures, nor were there any human casualties. Final repairs to the damaged pipeline installations are scheduled to be completed over the period of the next several days. [Text] [Warsaw ZYCIE WARSZAWY in Polish 3 Apr 84 p 1]

CSO: 2600/894

INCENTIVE SYSTEMS CRITICIZED AS NONMOTIVATING

Prague HOSPODARSKE NOVINY in Slovak 24 Feb 84 p 4

[Article by Eng Anton Vavro, CSc, Central Institute of National Economy Research, Bratislava branch: "Incentive System Which Fails To Motivate"]

[Text] The Eighth Plenum of the CPCZ Central Committee systematically analyzed all the obstacles standing in the way of accelerated application of R&D in the Czechoslovak economy and pointed out ways to overcome them. Great attention was paid by this plenum also to the problems of R&D, the improved utilization of the relatively extensive R&D potential of the Czechoslovak economy. A significant factor which could bring the interests of research and of production closer together is the system of financing and the system of incentives for organizations of the R&D base. The system's present arrangement includes many barriers which detrimentally affect the intensity of R&D efforts and cause its undesirable isolation from the needs and interests of production.

An important position in the mechanism of the khraschet-type system of incentives for economic organizations of the R&D base is occupied by the method used for determining the prices of R&D efforts and their economic effects. The preliminary prices are arrived at through individual calculation which follows one of two possible approaches depending on the nature of the task:

--on the basis of available documentation and expert estimate of individual costs differentiated according to the sectoral calculation formula used in the computation of prices of R&D efforts,

--on the basis of hourly billing rates and anticipated direct material consumption, cooperative contracts and subcontracts.

Calculation of the price of R&D efforts includes profit, usually in the amount of 20 percent of the processing costs. Processing costs for carrying out R&D efforts represent the sum of direct wages, other direct costs, operational and administrative overhead.

Prior to the commencement of an integrated stage of R&D or at the outset of the year the preliminary price is updated on the basis of actual costs already incurred in the completed part of the R&D project and in accordance with an updated estimate of costs for the remaining part of the project.

From the manner of determining the profit margin it is clear that there is an interdependence between the price, the amount of processing costs and the amount of profit. This interdependence predetermines to a great extent the level of indicators of economic effectiveness of the attained results and, as such, also the nature of the functioning and motivational effectiveness of the employed mechanism of the khozraschet-type system of incentives for economic organizations of the R&D base.

Oponentura proceedings are used to determine whether the price of an R&D project arrived at through individual calculation is justified and commensurate to the task. However, due to objective causes, it is not always possible responsibly to assess the economic aspect of dealing with the task at hand. Thus, oponentura proceedings cannot replace the functioning of an effective economic mechanism which would induce organizations of the R&D base to look for most effective solutions from the viewpoint of costs.

The economic consequences of the method used for setting prices of R&D projects can be comprehensively judged in connection with the effects of indicators used to influence and evaluate the activities of economic organizations of the R&D base.

The carrying out of factual tasks included in the plan of activities of individual institutes is motivated by economic instruments. These economic instruments take the form of value indicators and the indicators of the effectiveness of management derived from them. The basic value indicators are output volume, adjusted value added, profit, incurred costs and the available volume of wage funds. These indicators of effectiveness of management are not set uniformly for all economic organizations of the R&D base. Their selection and use is determined at the middle level of management or by central organs.

#### Cost Cutting Tends To Cause Problems

It is no easy task to describe briefly the specific forms of the negative effect that the still utilized system of fiscal management and system of incentives have been exerting on the operation of organizations of the R&D base. However, the mere mention of some of these relationships will confirm that this involves a system which does not meet the needs for intensification of R&D efforts.

The price setting method and the indicators used (primarily output volume) act against any potential decrease in consumption of materials and against the resolution of individual tasks. Savings of material costs (in view of the method for setting prices for R&D tasks) results in lowering the output volume. The interest in meeting the planned output volume is more intensive than the interest in adjusted value added. In addition, lowering material

costs in the existing method of billing for R&D tasks would not produce an increase in adjusted value added. According to the principles of billing for R&D, only costs that were documentably incurred in the given billing period can be charged in delineated factual or chronological (usually monthly) periods.

Thus, research institutes are billing only for actually expended costs; therefore, profit and outputs are accounted for on a continuous basis. Under such conditions cutting down on the consumption of materials (or costs for cooperation) in excess of the plan does result in savings of noninvestment expenses for R&D, but at the same time it cuts down the volume of the institute's output. In view of the manner in which the profit surcharge is added to prices for R&D, even though the costs for materials (or cooperation) may have dropped, the amount of profit remains unchanged. While in this instance the prescribed indicator of effectiveness (share of material expenses in outputs) is not detrimentally affected, there is a reduction in the volume of outputs. The existing system of incentives does provide an opportunity for compensating a drop in outputs occurring as the result of lower consumption of materials--but it is rarely resorted to in practice. According to the regulation, the R&D organization can keep the difference between the preliminary and the verified price up to 5 percent. Use of this opportunity would translate into compensating for a drop in outputs (even though only below a certain limit).

The effect of the applied khozraschet-type system of incentives for organizations of the R&D base, abetted by the methods of billing for R&D, results in having the institutes concentrate rather on using up (exhausting) all planned noninvestment expenditures for R&D.

#### Shortening of Deadlines Equals Lower Profit

The conclusion about the neutral or negative relation of the applied system of khozraschet-type systems of incentives for economic organizations of the R&D base applies also to labor costs. A decrease in labor costs can be, e.g., the result of an incorrect estimate of the number of working hours required for completion of a given task, or can be produced by a more efficient method of the task's completion. If it becomes possible to reduce labor costs against original expectations, even though socially effective, it brings no economic advantage, not even to the R&D organization.

A drop in direct wages for completion of a task results in decreasing the output volume and reducing profit and, subsequently, deterioration in the indicators of the effectiveness of management (a deteriorated indicator of the share of material costs in outputs as well as the return on production assets ratio). In general, there occurs a failure to meet or a deterioration in those indicators, the level of which depends on the amount of profit.

Savings in labor costs (in view of the method of cost calculation and billing) is connected to cutting down on the time needed for project completion, i.e., releasing additional capacities. If these capacities are used for completion of other projects, the missing sum of outputs can be compensated for in this manner. However, for many reasons that are mainly due to the planning system,

utilization of these hidden resources is complicated. This causes the interest of research institutes in savings of labor costs to be limited.

#### Forms That Fail To Be Used

The above-mentioned potentially negative effect of the currently applied knozraschet-type system of incentives for economic organizations of the R&D base is to be countered in essence by two factors:

--management of research along tangible (scientific and technological) lines, i.e., assigning of specific tasks in the form of binding specifications that are to be achieved as part of the project, assessment of tasks through adversary analytical proceedings, etc.;

--a system of motivational measures connected with setting prices for R&D.

These motivational measures that complement the principles of setting prices for R&D represent a key economic instrument which is to neutralize the effects of the applied principles of the khozraschet-type system of incentives. These motivational measures, derived from paragraph 72 of the price decree, are to promote intensification of R&D activities, specifically cutting down on deadlines, adhering to and lowering costs of projects vis-a-vis the preliminary price and achieving technoeconomical specifications of projects better than those prescribed (assigned). In accordance with these provisions, the contracting organization cannot bill for a price higher than the preliminary price. On the contrary, if the verified price is lower by more than 5 percent than the preliminary price, it is decreased by an amount exceeding 5 percent of the preliminary price. Thus, the contracting organization, while lowering the costs, can increase the verified price by 5 percent. (This possibility does not apply to tasks financed from the state budget.)

When the contracting organization manages at the request of the contractor to accomplish the project in a shorter time than specified in the relevant R&D plan or the economic contract pertaining to the project, the organ or organization which determined the price can increase it, pending agreement with the contractor, in accordance with the actually attained results by up to 20 percent. The regulations of setting of prices for R&D also contain provisions for promoting achievement of project results that are better than originally specified (assigned). When according to the ruling of a final oponentura proceeding the project results significantly exceed the prerequisites taken under consideration by the relevant R&D plan or in the corresponding contract dealing with the project, the contracting organization can increase the price, just as in cutting down on a deadline, by up to 20 percent. On the other hand, when the project results through the fault of the contracting organization fail to meet the contractor's requirements, the latter can propose to reduce the originally set price to a sum corresponding to the extent to which the results are usable, but by at least 15 percent.

These forms of price stimulation create the prerequisites for the effects of prices for R&D projects on influencing the intensification of R&D activities

and make it possible to use value criteria alongside tangible criteria in the assessment of the attained results.

#### Neglected Opportunities

The outlined system of motivational effects of supplementary instruments on prices of R&D projects shows potential prerequisites for promoting the intensification of R&D activities and weakening (or neutralizing) the negative effects of some indicators, price setting based on costs and inclusion of profit in such prices. The interest for achieving a surcharge on the price of R&D projects should be the natural result of a khozraschet-based system of incentives. In practice, as confirmed by findings from a relatively wide circle of economic organizations in the R&D base, the cited price stimulation potential fails to be used.

Among the reasons which account for the failure to use price stimulation in the area of R&D projects are mainly:

- inadequate interest among contracting organizations to complete projects before the planned deadline; this lack of interest is primarily the result of their insufficiently effective interest in the application of R&D as well as limited possibilities and lack of readiness to implement the project results prior to the originally planned deadline;
- the often great difference in time between completion of the project and its implementation in practice, connected with economic gains for the user; in this situation there is no clear connection for the latter between the results of the project and the contributions derived from its implementation;
- differences in computations of economic effectiveness of the completed projects on the part of the contracting and the implementing organization; the reason for such differences are primarily shortcomings in the methodology for computing the economic effectiveness of individual tasks and quantification of the effects achieved after implementation;
- shortage of resources in technical development funds or organizations awarding contracts with which to pay for increased prices of R&D: with the existing methods for planning the generation and utilization of resources for the technical development fund of the contract-awarding organization, the latter have essentially no means for paying higher prices of R&D projects;
- an inadequate amount of interest primarily among those economic organizations of the R&D base that are a part of individual VHJ's [economic production units] to achieve this surcharge; their financial management is controlled by their fiscal plan, which essentially eliminates any possibility for using resources obtained through surcharges for an institutional or individual system of incentives; this problem is most pronounced in research institutes which are fiduciary organizations of concern enterprises.

## More Effective Intertwining of Interests

Having fiscal and economic instruments effectively influence the intensification of R&D activities and intertwining the interests of research and or production is not connected only with improving their system of fiscal management. The intensification of R&D efforts and, particularly, smoother functioning of the research-development-production-utilization cycle is affected by many factors.

The basic, decisive factor on which depends the intensity of pressure on the activities of preproduction stages, orientation of their efforts, the type of organization of relations between research and production, i.e., implementing organizations. The extent to which R&D findings are applied, interest in their generation and use is always a reflection of the intensity of the interest shown by implementing organizations in their economic results.

A significant prerequisite for improving the smooth functioning of the research-development-production-utilization cycle is a change in organizational relations between the contracting and implementing organizations. The existing barriers between these organizations resulting from the traditional organizational arrangement of the R&D base (and connected with isolated assessment of the results of efforts exerted by individual institutional elements in the research-development-production-utilization process cannot be always overcome merely by improving the system of fiscal management and the system of incentives in organizations of the R&D base.

An important role in evaluating the results of the activities of economic organizations of the R&D base is played by the price of R&D efforts. The existing method of price setting and, particularly, of adding the profit surcharge is often counterproductive to the potential and interest in intensification of research efforts. Thus, improvement of the method for setting prices of R&D operations represents one of the prerequisites on which improvement of the khorraschet-oriented system of incentives of R&D depends.

Assessment of the results of the efforts or organizations of the R&D base uses essentially the indicators applied in production organizations. The need for meeting these indicators--inadequately adapted to the specific conditions of R&D operations--results in a failure to use existing untapped resources and can actually limit the creative nature of operations of these organizations. Thus, improvement of the khorraschet-oriented system of incentives in research should be tied to setting up indicators which better reflect the nature of operations in this area.

In view of the creative nature of work in organizations of the R&D base, an important position accrues to a personal system of incentives. It is specifically under conditions in which the institute's khorraschet system of incentives fails to motivate the intensification of R&D activities in the requisite measure that these objectives be pursued by a system of personal incentives.

A significant contribution to reinforcing the system of incentives in R&D are principles of the experiment for accelerated R&D. Nevertheless, even under conditions of implementation of the experiment, many problems attendant to the system of fiscal management and the system of incentives in R&D remain topical. Their resolution will eliminate another of the barriers standing in the way of the accelerated application of R&D in the Czechoslovak economy.

8204  
CSO: 2400/280

CZECHOSLOVAKIA

POTAC VIEWS 1984 PLAN FOR ECONOMIC, SOCIAL DEVELOPMENT

Prague PLANOVANE HOSPODARSTVI in Czech No 1, 1984 pp 1-9

[Article by Svatopluk Potac, deputy premier of the CSSR Government and minister-chairman of the State Planning Commission: "The State Plan for Economic and Social Development for 1984"]

[Text] The Ninth Plenum of the CPCZ Central Committee on 23 and 24 November 1983 discussed the "Presidium Report on the State Plan for Economic and Social Development for 1984."

The report itself, the discussions of it and the concluding speech by Comrade Gustav Husak all indicated the seriousness of the stage that we are passing through in international political development and the great significance, given these conditions, that fulfillment of the economic objectives of the current 5-year plan and of the annual plan targets for this year would have in terms of meeting the objectives of the 16th CPCZ Congress. The Central Committee reviewed the positive national economic results which are a confirmation of the feasibility of the economic policy of the CPCZ Central Committee Presidium and the CSSR Government and a confirmation of the correctness of the assertive attitude that has been adopted toward the implementation of the Seventh 5-Year Plan under the complex conditions of the 1980's.

This attitude, as drafts for the 1984 plan have indicated, has not been an easy one to maintain, nor will it be in the future. The individual years of the Seventh 5-Year Plan each have had a specific feature reflecting changes in internal and external conditions. The analysis undertaken by the 16th CPCZ Congress confirms that we may expect to encounter substantially more difficult conditions than were the rule in the 1970's during the implementation of the "Main Trends in Economic and Social Development in the CSSR in the Years 1981-1985." A more complex situation has arisen that was assumed for purposes of preparing the materials that were used at the 16th Party Congress.

While pursuing the fundamental objectives of a more consistent intensification process, it was necessary to take steps as well during the first 2 years of the Seventh 5-Year Plan to resolve several particularly serious and urgent national economic problems which it has been possible to overcome only by adapting annual implementation plans to the new situation and by means of active, centrally managed measures.

The Seventh 5-Year Plan, despite several deviations in its current level of fulfillment, is nevertheless adhering to its overall conception and maintaining basic national economic proportionality and stability. National economic development results achieved during the current 5-year plan indicate that we have been basically successful in fulfilling the objectives outlined by the 16th CPCZ Congress, objectives that were exceptionally demanding of material resource allocation, management and implementational forms.

In the area of foreign relations it was primarily a question of coming to terms with the consequences for our economy of the ongoing economic crisis of the capitalist countries and the numerous discriminatory trade and credit measures that have been imposed on the socialist countries. The gradual re-establishment of external economic equilibrium in freely exchangeable currencies has made it necessary, in the interest of strengthening our independence from critical capitalist states, to embark on a policy of debt reduction, implemented by assuring an excess of exports over imports.

It was necessary to resolve the tension which had arisen in the fuel and energy balance by reducing supplies of enriched fuels and increasing the acquisition costs of domestic energy resources. Likewise, it was necessary to overcome the growing and no longer tolerable disproportion between plant and livestock production that has resulted from our inability to meet plan targets for plant production. In conjunction with this convergence of several serious external and internal problems, it became essential to speed up the gradual conversion of the economy to an intensive development mode, to adapt the production structure, technological sophistication and production efficiency to worldwide research and development trends and to a more demanding stage in the process of international socialist economic integration. Intensification, a high level of efficiency and work quality have come to constitute the material precondition for the realization of the fundamental objective of the 16th CPCZ Congress--the maintenance and further increase in the living standards of the people and the strengthening of their social security. The policy of re-establishing equilibrium in external economic relations and of raising living standards have required us to limit accumulation, especially investment.

The pace of economic development in 1981-1982 was adapted to the need to resolve all of these problems. It was therefore slowed down in a planned manner, so that adaptations of the economy to these new conditions could proceed more rapidly. In short, the policy of reestablishment and strengthening equilibrium was given preference over the growth rate. The fulfillment of the main developmental objectives and tasks, and the assurance of proportional and balanced development in the Seventh 5-Year Plan, had to be given a firm basis and organizational structure. After the formation of these preconditions it was then possible to embark, in accordance with the plan for the Seventh 5-Year Plan, on speeding up the growth rate beginning in 1983.

Current fulfillment levels of the annual implementation plan indicate that in terms of national economic management we have basically succeeded in mastering the main tasks involved in adapting to the new conditions and in implementing the basic strategies of the Seventh 5-Year Plan in critical economic areas:

--Equilibrium in the area of freely exchangeable currencies is being attained, in accordance with plan objectives. During 1982-1983 the net indebtedness of the state declined as the result of a very positive balance of trade. This is a very demanding process, but in terms of freeing ourselves from economic dependence on the tactics of the political and financial circles of the capitalist countries this is essential. In addition, the repayment of foreign credits substantially reduces our debt servicing costs.

We are maintaining balanced or positive trade balances with the socialist countries, while the mutual trade turnover in current prices is increasing faster than plan projections.

--The increasing imbalance between plant and livestock production was resolved by reducing the production and consumption of meat and by a number of economic measures including retail price adjustments and compensation in the area of incomes. The purposeful intensification of agricultural production is critical to the permanent attainment of the desired balance between plant and livestock production. In the 1981-1983 period plant production increased at a rate that was 6.6 percent faster than the annual average for the Sixth 5-Year Plan, while livestock production showed a 4.2 percent increase, especially last year.

--The scope and structure of capital investment projects was adapted to the volume of resources designated for domestic use, with preference given to the maintenance of the existing standard of living. Investment as a percentage of gross consumed national income declined from 30.5 percent in 1980 to 29.4 percent in 1983. Carried over budgeted costs for noncompleted construction projects were reduced by Kcs 34 billion over the past 3 years, or by 24 percent.

The adaptation of the economy to changes in internal and external conditions, and its conversion to an ongoing and balanced growth rate, have been implemented in such a way that the assurance of personal consumption remains the foundation of the standard of living. On the average for the past 3 years, and following a decline in 1982, real purchasing power has increased by about 0.3 percent annually.

Undesirable deviations have been turning up in those sectors where economic intensification has not yet become well established, where the inertia from any number of extensive factors has not been overcome, or where the principles of the Set of Measures have not yet been fully implemented. This is particularly the case when products are used in several sectors which do not correspond to public requirements, and is especially evident in the failure to fulfill export targets to nonsocialist countries and in problems with the development of inventories. Pressures to make investments are increasing. Deviations in the development of wages payable resources is in conflict with the development of the social productivity of labor and is partially due to the exceeding of plan targets. At present the practical implementation of research and development findings has not been meeting projections, nor are certain tasks important for the success of economic intensification being completed as planned.

## Demanding Concept of the 1984 State Implementation Plan

The Seventh 5-Year Plan establishes especially rigorous objectives for 1984 and 1985, not only in terms of the growth rate but also in targets for increased developmental effectiveness. It is during the final 2 years of this 5-year plan that most of its projected growth in national income and industrial production is supposed to be realized. This means that in contrast to the development achieved in the first 3 years of this 5-year plan, there must be a much more substantial increase in overall economic growth at the same time that, just as in 1981-1983, there will be an ongoing adaptation of the economy to the requirements of equilibrium in foreign economic relations, reduced energy and material intensiveness of production, increased technical sophistication and quality of production, and increased export competitiveness. In accordance with the resolutions of the Eighth Plenum of the CPCZ Central Committee, an acceleration is projected in the conversion of the economy to an intensive development mode, above all through the wider use of research and development advances.

This implies that in the fulfillment of the objectives of the Seventh 5-Year Plan one must not overestimate the positive results that have been achieved in the first 3 years, because the critical step in the fulfillment of our major developmental objectives remains ahead of us. The current level of fulfillment of the annual implementation plans and work on the formulation of the 1984 state plan indicates that the national economy contains significant potential sources for the further acceleration of development and for greater efficiency in the entire production process.

The State Plan for Economic and Social Development for 1984 is based on the assumption that we will successfully retain and further strengthen all the current positive trends, suppress negative phenomena, utilize existing under-utilized capacities, and that we will assure the major objectives of the Seventh 5-Year Plan by the end of this year through improved organizational and managerial work and by making use of broadly based worker initiatives.

The basic concept of the plan assumes the existence of the following trends:

--a further increase in the rate of economic growth; gross national income will increase by 3 percent in real terms, i.e., by Kcs 15.7 billion (as measured by constant 1977 prices)--this is in comparison with growth of 0.5 percent in 1982 and 2.2 percent in 1983;

--a major factor in growth will be higher valuations given to consumed fuel, energy and raw materials. The qualitative side of development is to be emphasized, and is to be expressed by a reduction in the share of social product accounted for by production consumption (excluding depreciation), to 56.4 percent in comparison with 57.1 percent in 1982 and 56.8 percent last year. This means realizing materials savings in the operation of social production of almost Kcs 5 billion, a level that has never before been achieved;

--an effective increase in resource formation for material production in conjunction with the exertion of economic pressure on the qualitative aspects of development will be expressed in the state plan by an increase in adjusted value added of 3.8 percent, with an increase in labor productivity of 3.1 percent. Total costs as a percentage of output should decline by 0.6 percent, and that of material costs by 0.5 percent. Inventory turnover in industry and in construction should be 2 days faster, representing the freeing up of inventories with a value of about Kcs 4.1 billion. Increased effectiveness and managerial efficiency will assure increases in profits in the state plan of 7.6 percent. Nevertheless, tension exists between financial needs and the available resources which are caused especially by increased demands for investment;

--labor productivity should increase by 2.6 percent and account for about 86 percent of the increase in gross national income;

--the concept of the gradual reestablishment and strengthening of external economic equilibrium requires that, just as in the past 2 years, a portion of the resources that are produced be allocated abroad. About one-half of the real increase in national income has been designated to cover external requirements;

--even so, an increased rate of resource formation makes it possible to use a greater portion of generated national income for domestic needs than has been the case in past years. Opportunities are therefore expanding for the implementation of objectives particularly in the area of personal and public consumption;

--priority is being given to the assurance of the basic objective of the 16th CPCZ Congress--the maintenance and further increase in the quality of the living standard that has been achieved and the further strengthening of social security. The scope of overall personal consumption is projected to increase by Kcs 3.4 billion, or by 1.5 percent, and the amount of resources allocated to material public consumption, namely education, public health, culture, and the like, is projected to increase by 2.8 percent. On a per capita basis and taking into account the amount and structure of demographic development, the basic objective of the Seventh 5-Year Plan is being adhered to;

--the volume of resources designated for investment will remain at the level of the 5-year plan average, with this amount of Kcs 140 billion representing 28.6 percent of consumed gross national income.

#### Development in the Main Production Sectors

The conception of development in the area of resource formation is established so as to assure an acceleration of the pace of economic development at the level projected by the Seventh 5-Year Plan, further progress in the resolution of existing structural problems, a higher valuation of energy, raw material and material inputs and the orientation of production to the priority assurance of the needs of foreign and domestic trade.

The industrial character of our country continues to be strengthened. Industrial production is to increase by 2.9 percent (in comparable prices), meaning that it is to account for 79.6 percent of the projected increase in national income. An important aspect of the plan is the continuation of the process of the restructuring of the economy. A significant increase is projected for those sectors which are the main bearers of scientific and technical progress and which must use the specifications of their products to conduct an effective marketing operation, especially on foreign markets. The two fastest growing sectors are to be machine building, with a projected growth of 6.4 percent, and electronics (10.5 percent); within these sectors even faster growth rates are to be achieved for those products which are being manufactured under state priority programs. Greater than average growth is projected for the wood processing industry (5.1 percent) and for public health and pharmaceutical production (4.3 percent). In contrast, there will be an ongoing slowdown in the pace of production, and even stagnation or declines, in those sectors that are highly demanding of fuels, energy and imported raw materials--metallurgy (decline of 0.6 percent), construction materials (increase of 1.2 percent), oil refining and the deep extraction of coal. Light industry and the chemical industry will experience moderately below-average growth rates.

This significant strengthening of the qualitative aspects of increased industrial production is reflected in the plan in additional pressure for the effective and economical utilization of all critical fuel, energy and raw material inputs. Per unit of generated national income, in addition to declines in fuel consumption of 0.9 percent, there are to be reductions in the consumption of rolled materials of 3.3 percent, of zinc of 3.9 percent, of brass of 2.7 percent, of lead of 4.9 percent, of cement of 2.1 percent, etc. This reduction in the energy and materials intensiveness of production will be assured, just as in recent years, by means of state priority programs for the nationalization of fuel, energy and metals consumption.

Increased resources in the area of industrial production are first allocated to cover export obligations to socialist and nonsocialist countries, so as to achieve the objectives of the Seventh 5-Year Plan in relation to the balance of payments. This requires the assurance of increased deliveries of industrial production for export of about 5 percent in wholesale prices. To satisfy personal consumption demand, an increase in deliveries of 3.1 percent in retail prices is projected for the domestic market, as well as providing for their more consistent adaptation to meet the demand of consumers particularly for luxury and higher quality goods, improving deliveries of goods that have been chronically in short supply, increasing the percentage of durable goods, along with greater variety in product mixes.

After a decline in construction output, this year, just like last year, will see a moderate increase in this area of 1.4 percent. Increasing the output of our construction industry presupposes its further structural adaptability to the specific objectives of capital investment and to the specific phases of the investment process, including the focusing of resources for the accelerated completion of projects.

Just as in industry, urgent structural problems are also being resolved in agriculture. This primarily concerns an objective of the 16th Congress--the gradual achievement of self-sufficiency in food production. An important event of last year, which demonstrated the feasibility of the designated tasks, given the proper conditions, was the bringing in of a grain harvest in excess of 11 billion tons, and a substantial overfulfillment of the plan target for rape seed. In terms of proportions, however, the most serious problem is that despite a reduction in livestock production to correspond to the available fodder sources it is proving difficult to implement the desired relationship between the growth rates of plant and livestock production.

Taking into account the existing situation, the 1984 plan sets the objective of achieving in agricultural production the level projected by the Seventh 5-Year Plan, thereby assuring at least a nutrition level for the population that is in line with its objectives. To assure the necessary relationship between the two it is essential to raise plant production by more than 5.2 percent in comparison with its 1983 performance.

The production of 11 million tons of grain and of 14.9 million tons of bulk fodders (in straw value) are the main objectives, the fulfillment of which is critical for keeping the animals in the form necessary to assure the intensive development of livestock production through increased usability and a higher valuation of agricultural production in foodstuff production. Livestock production, because of its development in excess of the plan last year, is to be reduced this year by 3.9 percent, to the level of Seventh 5-Year Plan objectives, in accordance with the planned level of fodder resources. Increased production from the food industry depends on raw materials sources from agriculture and from imports, the latter of which are conditioned by exports.

#### External Economic Relations an Ongoing Priority

The priority given to external economic relations continues to be the basis for the realization of the economic policy underlying the Seventh 5-Year Plan. Under the complex conditions of the world economy, given the high degree of openness of our economy to foreign influences, and in view of the policy of fully reestablishing external economic relations, the fulfillment of this directive is exceptionally difficult.

The exchange of goods with socialist countries predominates in our foreign trade. Foreign trade turnover is projected to increase by 9 percent. This is the basic objective of our foreign economic policy, and takes on exceptional political significance at a time when reactionary imperialist circles led by the United States are stepping up military, economic and ideological pressure on the Soviet Union and on other socialist countries. The accelerated conversion to economic intensification is proceeding objectively in all the CEMA countries and is generating the need for the closer coordination of economic policies and strategies. The intensification of the national economy is exceeding the boundaries of the national economies and is taking on an ever more significant integrational character.

The main economic and trade partner which is of vital importance for the CSSR remains the Soviet Union. Deliveries from the Soviet Union, which will increase by 11.2 percent this year over last, cover our needs for critical fuel, energy and raw material resources, especially crude oil, natural gas, iron ore and other raw materials. Cooperation between our two countries on research and development is expanding substantially. This is becoming an important area in the economic and political strategies of the entire socialist community.

In relation to the nonsocialist countries, the realization of a policy aimed at the gradual reestablishment and strengthening of equilibrium in foreign trade and in the balance of payments in freely exchangeable currencies through planned debt reduction is proceeding. Increases in exports are projected to be 4.6 percent in fob prices, with particular reference to machine building, the electronics industry, the wood processing industry and the agrocomplex. Exports to these countries are so far showing the greatest deviations from the objectives of the Seventh 5-Year Plan. The shortfall would be still larger if the failure to fulfill the valued plan for the processing industries had not been offset by increased, primarily bulk exports of raw materials and materials, above all petroleum and metallurgical products. A continuation of this situation would, however, weaken efforts at introducing effective structural changes and negatively influence the overall intensification process.

There is a very urgent need to achieve a permanent turnaround in the unfavorable evolution of exchange relations, where price increases for exports are not equivalent to the price increases for imports. Reversing this situation means adapting our production and the activities of trade organizations to the demanding conditions of foreign markets, to increase substantially the technical-economic parameters of our export goods, especially machinery and electronic items. Even under the current complex conditions it is essential to maintain our position in traditional sectors of foreign markets and to expand our offerings of new and state of the art goods.

The level of exports and their efficiency in assuring the repayment of credits, debt servicing costs and other foreign currency needs of the balance of payments in freely exchangeable currencies continues to be the basis for the implementation of those imports which are feasible. It is essential that the achievement of the planned positive trade and payments balances in freely exchangeable currencies not be assured through additional counterproductive constraints on imports, which would reduce the opportunities for the production and coverage of the needs of the national economy and the domestic market.

#### Realizing the Fundamental Objective of the 16th CPCZ Congress

Regarding the standard of living, the plan for 1984 is based squarely on the resolutions of the 16th CPCZ Congress, which are making possible the current positive development of the national economy and the planned level of resource formation. Following an increase in personal consumption last year of 1.9 percent, projections this year are for an additional 1.5 percent increase. This will put personal consumption per capita at a level 1.5 percent higher than at the start of the 5-year plan.

The satisfaction of the needs of the population will be realized, as it has in the past, largely through their monetary incomes. The volume of these will increase by 1.6 percent and reach roughly Kcs 400 billion. The average wage for workers in the national economy will exceed Kcs 2,870 monthly. The implementation of state wages policy mandates increased differentiation in compensation according to achieved results, quality and amount of work and additional average wage increases through labor reductions.

The smooth realization of these monetary incomes is to be assured through an increase in retail trade turnover of 2 percent. This increase may be fully assured through deliveries of imports and exports. The above figure includes projected increases in sales of industrial goods of 2.4 percent and of 1.3 percent in food sales, along with improvements in quality and product availability on the domestic market. The strengthening of the structural supply of goods and services is an essential precondition for improving the situation on the domestic market so that over the short term the type and quality of available products will exceed the demand represented by the consumption preferences of individuals.

Systematic attention is being devoted to assuring the social security of workers, in the spirit of the 16th Congress resolutions. Ongoing increases in public consumption funds are exceeding the projections of the Seventh 5-Year Plan. Public consumption per capita will reach Kcs 10,800, which is almost Kcs 2,000 greater than in 1980.

The preconditions are being created for an across-the-board increase in the quality and the sophistication of public consumption. This has led to annual increases in the number of employees, the size of which have exceeded original projections. Since 1980, for instance, the number of employees in the education sector has increased by 21,000 and the number of public health employees has increased by 24,000.

The number of apartments that has been completed (90,000) is lower than projected in the plan. Therefore, provisions have been made to increase the number of new apartment starts by 7,500 so that they can be put into use in 1985. This should also lead to a reduction in the current low level of fulfillment of certain apartment construction objectives.

#### Guiding the Capital Investment Process

The capital investment plan for 1984 adheres to the basic conception of the Seventh 5-Year Plan, the objective of which was to improve all phases of the investment process, further reduce investment as a percentage of national income, shorten construction schedules, reduce the amount of noncompleted construction projects, and focus investment projects on critical areas of research and development. The facilities opened in 1983 will have substantial importance for resources formation once their startup period has been completed and they have reached their designed parameters in terms of production.

The limited investment possibilities are reflected in the amount available, which remains at last year's level even though there have been essential

increases in investments in the fuel and energy complex, in agriculture, in machine building and in comprehensive housing construction. The plan provides for an increased share of modernization projects and for the possibility of implementing projects with central resources to speed up research and development, the production of single-purpose machines and the importing of advanced machinery for foreign currency repayable credits.

Within the structure of investments there will be a further strengthening of investments in the fuel and energy base, which will account for almost 38 percent of total investments in industry, and represent Kcs 7 billion more than was projected for this purpose in the Seventh 5-Year Plan. A significant part of this increase results from the need to cover increased budgeted costs for the noncompleted nuclear power plants and Jaslovske Bohunice and at Dukovany. Investments related to the rationalization of the consumption and use of fuels and energy are equal, no greater in importance than investments in fuel and energy resources. The complementation of state priority program 02, "Rationalization of the Consumption and Use of Fuels and Energy," requires more rigorous approaches, and particularly the thorough and comprehensive preparation of all projects and the coordinated activity of the participants.

Besides the increased percentage of fuel and energy investments there will also be a further strengthening, in terms of the Seventh 5-Year Plan, in investments in agriculture, particularly in special investment projects.

In order to speed up the construction of the utilities and public facilities at apartment complexes investments will increase in comprehensive housing construction. This objective of the plan should help to eliminate at least a portion of the current shortcomings in the level of services offered at apartment complexes as well as facilitating some progress in the completion of noncompleted facilities, especially those of a public nature, thereby reducing what has so far been an excessive level of noncompleted projects in comprehensive housing construction.

Current increases in budget costs at all large construction projects, especially at nuclear power plants, along with the need to adhere to the constraints for noncompleted construction projects established by the 5-year plan for 1985, have made it necessary to cut back further on the beginning of new construction projects. The value of initiated projects has declined to Kcs 46 billion, which is Kcs 10.7 billion lower than the objectives of the Seventh 5-Year Plan. The exceeding of original figures for budgeted costs is reducing the resources available to other sectors and for other purposes. It is essential to determine the reasons for this unjustified increase in budgeted costs so as to increase the efficiency of investment.

In accordance with the Set of Measures and the new decree regarding invoicing procedures, tasks and measures intended to strengthen the final stages of construction work have again been included in the plan. The course of supplier-consumer relations, however, has indicated that it is necessary to devote greater attention to this new and promising element right at the initial phases of capital construction, and primarily when dividing up the design documentation for the constituent construction units. This is a matter of

more rationally utilizing construction capacity for critical public priorities and for the more rapid completion of construction projects. A further objective is to prevent the dispersion of construction capacities to smaller and less important newly initiated projects.

The year for 1984 basically assures the fundamental objectives of the Seventh 5-Year Plan and thereby generates the conditions for their fulfillment. The current level of fulfillment of 5-year plan objectives and the tasks established for 1984 create the conditions so that economic production units [VHJ] and enterprises may immediately begin drafts of their implementation plans for 1985, the objectives of which are set forth in the Seventh 5-Year Plan.

The requisite system conditions have also been created so that senior managers in sectors, VIIJ's and in enterprises can initiate these tasks sufficiently ahead of time. We must make better use of the experiences that have been gained to date from the Set of Measures and the experiments that have been conducted in counterplanning and formulate proposals for the 1985 plans that will correspond to the basic strategy of the 16th CPCZ Congress.

9276  
CSO: 2400/281

## CZECHOSLOVAKIA

### ENERGY INDUSTRY RESULTS IN 1983 SUMMARIZED

Prague HORNIK ENERGETIK in Czech No 4, 1984 p 3

[Article by Eng Miroslav Macel, manager of the Economic Information Department of the Federal Ministry of Fuel and Power: "Last Year; the Greatest Extraction Level in History"]

[Text] In 1983 the fuel and power sector fully assured the requirements of the national economy and the population for solid fuels, heating gases, electric power and heat. The smooth fulfillment of deliveries of all types of fuel and energy during the year was one of the important factors in the dynamic development of the entire national economy. All branches of this sector participated in this positive performance.

#### Coal Industry

In 1983 this branch mined a total of 127.4 million tons of coal and lignite, which is the largest annual extraction level in the history of Czechoslovak coal mining. For the first time as well, we exceeded the level of 100 million tons of mined brown coal and lignite. The state plan was exceeded by 3.5 million tons, and the extraction level was 2.8 million tons greater than the year before. Overall, the coal industry recorded the following results in its basic production indicators:

<u>Indicator</u>	<u>Actual 1983</u>	<u>Percentage of Plan Fulfillment</u>	<u>Index 1983/ 1982</u>
Bituminous coal	26,915	100.2	98.0
Brown coal and lignite	100,417	103.6	103.5
Total--coal and lignite	127,385	102.8	102.5
Mining coke	3,335	100.5	94.8
Briquets	1,104	110.4	99.4
Sorted coal	22,709	105.6	103.1
Overburden removal in thousands of cubic meters	231.522	108.2	112.0

A positive feature of this performance is the fact that all concerns and production enterprises met their production targets even though it was necessary at some enterprises during the year to adjust the plan because of exceptional events and unforeseeable changes in mining-geological conditions.

In all deep mining districts and in the deep mining enterprise of the North Bohemian Brown Coal Mines [SHD] so-called working Saturdays were organized during the past year with a modified work schedule so as to increase the usable fund of annual work time. Seven of these Saturdays were organized in each enterprise and led to the mining of 969,000 tons of coal. To fulfill planned extraction targets, the deep mining districts also organized overtime mining on days off which made possible the mining of almost 2.5 million tons of coal.

An analysis of the development of coal mining indicates that:

--there is ongoing stagnation in the development of deep mining, because the implementation of the results of technical developments and innovations in mining processes has not been sufficient to eliminate fully the gradual worsening of the mining-geological conditions and technical situation in coal mining, which has contributed to a further worsening in the concentration and effectiveness indicators of the mining process;

--there has been a substantial improvement in the situation in surface mines, above all in terms of increased operational reliability of new equipment and in improvements in organizational and managerial work. Exceptionally favorable climatic conditions that lasted for practically the entire year also, without a doubt, contributed to the positive performance by surface mines.

#### Gas Industry

This sector smoothly met the needs of the national economy throughout the year for heating gases. It met the planned extraction targets for crude oil, assured the trouble-free transit shipment of natural gas, and fulfilled planned objectives in geological prospecting work for petroleum and natural gas.

As a result of the permanently lower consumption of heating gases, the planned production of coal gas at Federal Ministry of Fuel and Power [FMPE] facilities and the extraction of casing head natural gas was not met. On the other hand, planned deliveries of natural gas from the USSR, which constituted the primary source of natural gas, were exceeded.

Overall, gas organizations recorded the results shown on the following page.

The gas production industry also assured the planned overhaul of production and transporting equipment and tasks related to CSSR Government Resolution No 87/1983 concerning the assurance of necessary sources of natural gas in underground tanks prior to the winter season of 1983-1984.

## Gas Industry Performance Figures

<u>Indicator</u>	<u>Actual 1983</u>	<u>Percentage of plan Fulfillment</u>	<u>Index 1983/1982</u>
FMPE coal gas production in millions of cubic meters	3,080	98.7	98.1
Extraction of casing-head natural gas in millions of cubic meters	379	48.4	88.3
Extraction of carboniferous natural gas in millions of cubic meters	245	113.0	103.5
Crude oil and gasoline extraction in thousands of tons	93	105.9	104.6
Geological prospecting tasks in thousands of meters	141		

The gasification of new villages proceeded in 1983 in accordance with the Seventh 5-Year Plan, with a total of 14 villages being hooked up to sources of heating gas in the CSSR. The number of natural gas consumers increased by 46,943, and of coal consumers by 14,739. In the CSR last year 65,765 coal gas customers converted to natural gas.

## Power Generation

The generation of electric power was influenced positively by large inventories of solid fuels at power plant storage facilities and by higher deliveries of brown and bituminous coal throughout the year. On the other hand, production was negatively influenced by a tense situation in the output balance caused by long-term shortfalls in production at the Detmarovice, Prunerov and Melnik II power plants and delays in the operational startup of new production blocks at nuclear power plants, as well as by shortcomings in water supplies for the functioning of hydroelectric power plants. Planned objectives for electric power generation were met by greater utilization of steam power plants, especially those fired by brown coal, and by exceeding production targets at the V-1 nuclear power plant at Jaslovske Bohunice. This in part made up for the shortfall in production caused by the failure to complete the first generating unit of the V-2 power plant on schedule. Overall, the power generation sector performed as follows:

<u>Indicator</u>	<u>Actual 1983</u>	<u>Percentage of Plan Fulfillment</u>	<u>Index 1983/82</u>
FMPE electric power generation in gigawatt hour	65,827	101.2	101.9
of which:			
Steam power plants, in gigawatt hours	55,924	102.5	101.4
Hydro plants, in gigawatt hours	3,750	89.1	103.9
Nuclear plants, in gigawatt hours	6,150	97.6	105.3

Usable electricity deliveries in gigawatt hours	69,323	101.4	102.5
Production in delivered heat, in terajoules	110,771	95.8	101.6

The failure to fulfill targets for delivered heat production was caused by lower consumption primarily in the first quarter due to favorable climatic conditions.

The development of standard fuel consumption for electric power generation last year was influenced negatively by the necessity for operating to a greater extent than planned less economical power plants, particularly power plants supplied directly by brown coal in the brown coal districts near the Krushna Mountains. The planned standard consumption of 111,076 gigajoules/megawatt-hour was exceeded by 0.2 percent, but declined by 0.4 percent from the preceding year.

During 1983 the power industry conducted a total of 25 overhauls and reconstructions of large energy generation units, 12 of which were completed ahead of schedule and 3 of which will be completed during the first quarter of 1984. Because of the need to cope with the problematical output balance, the beginning of two other overhauls of power plant units was postponed until 1984.

#### Sectoral Construction Organizations

In the past year these organizations fulfilled all the critical plan indicators for construction output, consisting of basic construction output (101.5 percent), and construction work according to supplier contracts (106 percent), the latter of which includes targets for work on capital investment projects (104.9 percent).

Along with the assurance of production tasks, assignments were also completed in the past year related to the further development of the fuel and energy balance.

#### Capital Investment

In this area projects and deliveries were completed with a value of more than Kcs 2 billion. In the coal and gas production industries targets were exceeded by far, while in the power industry targets were substantially underfulfilled primarily because of shortfalls in nuclear power plant construction, where the annual plan was fulfilled at only a 74.8 percent level. In the past year new facilities were gained through the capital investment program for the mining of brown coal in the Ostrava-Karvina district with a capacity of 3.1 million tons, for the mining of brown coal at the North Bohemian Brown Coal Mines and the Brown Coal Mines and Briquette Plants with a capacity of 5.7 million tons annually, for the production of delivered heat with a capacity of 2 x 115 tons per hour, and for the storage of natural gas in underground tanks with an initial capacity of 4.2 million cubic meters per day. To increase the transporting capacity of international gas pipelines, a total of 16 new turbosets were made operational at compressor stations.

Preliminary financial results indicate that the fuel and power sector also performed well in the past year in terms of financial and economic indicators. Above all, it exceeded its targets for planned profit formation and adjusted value added, and adhered to its constraints on material and overall costs.

9276

CSO: 2400/284a

AGRICULTURAL PRODUCTION, EFFICIENCY, IMPORTS IN FRG, GDR COMPARED

West Berlin FS-ANALYSEN in German No 6, 1983 pp 31-49

Article by K. Merkel: "Agriculture and Agrarian Politics of the GDR Under Conditions of Insecurity and Risk"

Text I.

When we relate the overall subject matter of this symposium to agriculture in particular, it is imperative from the total economic aspect to pursue two issues:

Firstly we need to raise the question of the prospective conclusions for agriculture, that the GDR is drawing from the fact that the "industrialization of industry," pursued since 1967, has turned out to have been a mistake. This has become quite evident from the early 1980's on, in view of the pressing problems incident upon the worldwide change in total economic conditions.

Secondly we must question the efficiency of farm production in the GDR and its potential improvement, because the agrarian weaknesses over there are demonstrated mainly by the fact that the expectations aroused by the prospect of industrially organized agriculture have failed to be realized. Even in the GDR they are no longer expected to materialize in the future either. As we know, it had been hoped on the one hand to raise output--the output volume and yields --and on the other improve the profitability of farming as a whole by high-grade specialization, intensification and the concentration of farm production in large operating units, linked among themselves by cooperation.

If the GDR wishes to succeed in effectively improving output and the cost/profit ratio in the agrarian sector, substantial agropolitical changes will be needed to ensure rational production in terms of the economy as a whole.

Given these facts, it follows that we should inquire whether a clear and precisely defined agropolitical conception has by now matured in the GDR, indicating the approach and method, extent and degree of the means and measures to be used for corrections holding out the promise of success. It has been more or less characteristic for earlier agropolitical developments in the GDR for theoretically designed models to be adopted a priori and--with greater or lesser compulsion--enforced in practice as well as expanded or amended depending on

the results achieved. We should therefore expect a clearly defined overall agropolitical conception to be to hand right now. Let me say at once that we would be bound to see our expectations disappointed, because there is as yet no indication whatever of an agropolitical conception going beyond a few isolated reforms. That also includes the agrarian price reform to take effect in the GDR on 1 January 1984. In the GDR it was heralded grandly as "one of the most thoroughgoing political and economic measures in the history of our agriculture." However, since a separate item on the agenda of the symposium is devoted to the farm price reform, it seems appropriate in the interest of a sensible demarcation from Karl Hohmann's report, to avoid a detailed analysis and evaluation of these price political measures.<sup>1</sup> This also seems right in view of the brief time available to me. In fact I can only try within these limits to sketch the most significant agropolitical and agrarian outlines with regard to the two questions I raised at the beginning, leaving aside many details. It is obvious that I will not be able to adequately deal with many issues, leaving more thorough treatment to the subsequent discussion. This applies to the aspect, among others, that ecological concerns are generally gaining importance, in addition to the economic appraisal of the measures of farm production. In the GDR, too, the environmental discussion is now under way. As a consequence of the advanced specialization and concentration in large farming enterprises, a specific problem of environmental damage has arisen in the GDR. I have time here to mention it only in passing. The same applies to the social consequences for the people in the rural areas affected by the GDR's agrarian policy, their working and living conditions. This is an aspect in regard to which it should be noted that it is frequently neglected in our consideration of economic policy and total economic interrelations.

## II.

When we look at the almost 40 years of agrarian policy as practiced on the GDR's territory, we note that it has always moved in the narrow range between economic necessities, real possibilities and long-range ideological objectives. At the same time political and sociopolitical motives and intentions were always decisive with regard to agriculture, too; economic targets had a lower priority and moved up on the scale only when either the set intermediate socio-political objectives on the way to the ultimate goal--agriculture run by large-scale enterprises on the basis of socialized ownership and industrialized production methods of the economic units--were met, or when serious economic problems and social tensions made it imperative to emphasize economic and social aspects .

At the moment the economic leadership of the GDR is once again in a situation inevitably requiring it to stress performance improvements in the agrarian sectors. Once again the crucial question arises by what realistically feasible means and measures, by what control mechanisms a change for the agroeconomic better is to be produced.

Unfortunately, regulative postulates tend a priori to substantially restrict the possible approaches promising more meaningful and efficient procedures. As we know, a fundamental change in the agrarian system by means of structural changes--for instance in direction of market economic elements or even small

family run farms--is totally out of the question in the GDR, and we cannot possibly expect any such move. To do so would be just as unrealistic and frivolous as to propose to the European Communities to adopt elements of the agrarian systems established in real existing socialism in order thus to settle the tiresome problem of farm surpluses.

Since we must exclude the possibility of the dissolution of the farm enterprises and ownership structure now prevailing in the GDR, it remains to us to investigate any promising means and measures of practical agrarian policy that might be used within the regulative system of the GDR.

Experience has taught the GDR authorities that it is not enough to better equip agriculture with production technical advances of all kinds--biological, mechanical and organization--and ensure the better training of the farm labor force. Instead many other important conditions must be met for them to be able to realize the hoped for improvement in output.

### III.

Hungarian agriculture offers an example for what can be done for the improved operational efficiency of farming within the scope of the communist ruled countries inside the Soviet economic and power bloc.

As we all know, Hungary's farming alone among the socialist agricultures of the CEMA countries operates with satisfactory results. The Hungarian People's Republic succeeded in guaranteeing the relatively stable supply of food for the public from its domestic farm output and also in producing surpluses and being competitive with some of them on the world market. This phenomenon is noted in the East as well as here in the West, especially with respect to the question whether the Hungarian model could be imitated by the agrarian sectors of other socialist planned economies.

I am indebted to the Center for Continental Agrarian and Economic Research in Giessen for thorough analyses, providing information about the relative excellence of the Hungarian variety of the agrarian system now specific to each CEMA country.<sup>2</sup> According to this, the conjunction of several factors serves to explain the agricultural successes achieved in Hungary.

Reduced to the essentials, they are as follows: Hungary abolished direct administrative planning and control of the farm cooperatives by state organs as long ago as 1968. Since then the enterprises are not assigned central plan targets for the various physical units, in other words no centrally allocated production and sales targets. These were replaced by so-called economic regulators--economic controls including mainly prices, subsidies, taxes, loans and delivery contracts. While plan figures are also fixed, this is done in sets, so that the decisionmaking of the production cooperatives, their subsections and even individual smallholdings in the private nonstate sector enjoys significant economic scope for the development of individual initiatives. The far reaching decentralization of decisionmaking powers allows relative freedom to the enterprises; they decide independently on their output structure, the purchase and use of capital goods, the range, volume and quality of their sales,

arketing methods and approaches, profit distribution, investments, contractual relations with other economic units, and so on. The fact that Hungary's agrarian policy has been geared to the market economic element of enterprise profit orientation for the past 15 years, is probably one of the main reasons for the operational efficiency of farming there.

Other important reasons also prevail. In general worldwide agriculture has available more and more new production techniques as time goes on. The efficiency of the agricultural production process in Hungary has certainly benefited from the fact that the adoption of modern production techniques is resolutely pursued. So-called production systems were developed for this purpose. Briefly this means that a farm enterprise equipped with modern machinery contracts (for payment) to act as pacemaker and to introduce its production technique to other agrarian enterprises.

In this connection and as another important criterion for the success of the Hungarian reforms, we must consider the fact that the strongly export oriented Hungarian agriculture and food industry cultivates foreign trade relations with Western firms. At the same time as it deals with them with regard to farm exports, it also carries on import and credit transactions involving modern farm equipment with these same firms. This provides a strong impetus to the Hungarian effort to adjust producer prices and capital equipment prices in farming to prices prevailing on the world market, thereby taking into account the real exchange value of the goods traded.

Finally, Hungary places a high value on the private sector. This was preceded by an ideological reappraisal of small individual farms. These are no longer considered a foreign body in the socialist economic system. The Hungarian cooperative law emphasizes the "organic unity" of large-scale socialist farm enterprises and private domestic and other smallholdings, in the spirit of the division of labor (in terms of cooperation) between capital and labor intensive output operations.

Another element predominates with respect to the efficacy of the sum total of all the factors mentioned above as accounting for the success of the reform of Hungarian agriculture. That is the climate of confidence created among agricultural producers in the last 15 years, due to the generally smooth flowing course of Hungarian farm policy, at a time when the political system in Hungary altogether experienced some liberalization also.

This digression on the "new economic mechanism" (the Hungarians' description of their agrarian reform) served to exemplify by way of a genuine example that which is feasible in the way of agricultural reform in a communist country ruled by planning principles. At the same time we may leave open the question whether or not the Hungarian reforms can be considered fundamental changes in the regulatory system. The decentralization of decisionmaking powers to the enterprises and the economic scope granted them have, admittedly, remained confined to Hungary and are unmatched anywhere else in the Eastern Bloc. Still, in Hungary also the party and state leadership reserved the right of revocation at any time, to return to a more centralized control of farming. In any case we must emphasize that the "new economic mechanisms" apply only to agriculture and

the food industry, not to any other sectors of the Hungarian economy. In the latter they are not anything like so far reaching, nor are they as profound even in agriculture and the food industry with respect to state owned farms and industrial enterprises.

#### IV.

For the situation in the GDR, too, the central question is this: How far should and how far could structural changes in the farm sector extend to be still acceptable to the ruling party, in other words without shaking the foundations of communist power. Can actually profound structural changes in GDR farming be expected, or are we going once again to witness merely administrative reorganizations?

If we take the Hungarian example as the criterion, it is out of the question for the GDR to take it over wholesale. Some essential conditions for doing so are lacking. Considering the general political atmosphere as a fundamental prerequisite of economic liberalization, a wide gulf yawns between the GDR and Hungary. The GDR's regulative system basically tends far more toward centralist management than does Hungary's. In view of the constant upheavals to which GDR agriculture has been subjected, the confidence of cooperative farmers and farm workers in the appropriateness of state agrarian policy is certainly not anything like as strong as seems to be the case among their Hungarian equivalents.

So-called economic levers, in other words economic instead of administrative influences on farming, are officially claimed to be important in GDR economic planning and management. However, their implementation and significance lag far behind the Hungarian example. Of course we must take into account the fact that the real exchange values of goods are rendered ineffective by the distorted price structure in the GDR. Consequently the flow of money is unable to reflect economic processes to the extent it does in world market oriented Hungary.

Finally, as regards the role of the smaller individual holdings and part-time farmers in the private sector, this is now tolerated and even encouraged in the GDR also. However, in contrast to the situation in Hungary, no equal and organized cooperation is involved with the large-scale farming operations of the socialist sector.

In summation, this rough comparison with Hungary clearly demonstrates that no really thorough agrarian reforms promising productive effects are visible anywhere in the GDR at this time.

#### V.

The question remains how the economic weaknesses are to be obviated, that now plague the extremely concentrated, intensified and specialized farm production in cooperatively linked large-scale socialist enterprises.

When the GDR proceeded to industrialized production in farming, the authorities --oddly-- failed to realize that the concentration and specialization of farm

production postulates only certain minimum dimensions. If these are exceeded, not only do costs not decline any further, they tend actually to rise quite considerably. The latter holds true indeed for agricultural enterprises in the dimensions prevailing in the GDR. The crop production enterprises boast an average size of roughly 5,000 hectares agricultural area, animal husbandry enterprises average livestock holdings of 1,500 large cattle units.

Moreover, large-scale farm enterprises do not offer the same cost benefits as industrial mass production, because the indispensable adjustment of output to natural conditions at the various locations in the GDR is thereby made much harder--in spite of the fact that these conditions tend to vary considerably even at short distances. Nor does any of this take into account the fact that the already top heavy administrative apparatus becomes even more cumbersome and expensive.

The GDR provides a prime example of the possibility for specialization sometimes to result in a stagnating if not declining soil productivity. Mono crop sequences necessarily lower yield standards or result in lower growth rates for yields than do alternating sequences. While larger fields raise labor productivity, they do not permit special cultivation of different soils on one extensive field area and therefore lower yields. The benefits of specialization, endeavoring to achieve manpower rationalization and accurate natural location orientation, are offset by hazards and uncertainties. In view of the fact that farm yields depend on the weather, and this or the other crop may yield a large or small harvest in any one year, enterprises specializing in single products run an increased production risk. Generally the planting hazards are greater the more such crops are preferred for cultivation, as are not really compatible, tend to be susceptible to disease or are exposed to pest damage and therefore require a lot of money spent on plant protection and pesticide products.

As for livestock keeping, it is true that livestock epidemics are now rarer in the GDR also, because they can be tackled more effectively. The fact remains, though, that keeping large herds in a relatively small space and in conditions arising from industrialized production processes, is not conducive to the good health and efficiency of the livestock, may reveal hidden dangers and requires substantial spending on regular health care.

The investments linked with farm industrialization in the GDR in the form of capital equipment with a long period of utilization (such as special buildings with fixed equipment and special machines) dictate the type of production for some time and therefore restrict the enterprises' flexibility. Insofar short-term corrections are not even possible.

Disregarding the agrarian price reform for the reasons stated at the beginning of this report, agrarian reforms in the GDR are usually limited to the rediscovery of safe and general perceptions of traditional agricultural management, its propagation and appeals to "farming" traditions and virtues.

However, this management rationale is contradicted by the fact that one of the most momentous wrong decisions involved in the industrialization process seems

to be inviolable. I mean the division of labor between crop production and animal husbandry, typical for GDR farming since the mid-1970's--in other words the planned and enforced dissolution of the coupling of crop and animal husbandry and the establishment of independent and specialized enterprises for crop production on the one hand and for animal husbandry on the other. It is obvious that an early return from inter-enterprise to internal-enterprise associations is not really possible in view of the above mentioned installation of long-lived plant. Instead a closer cooperation between crop and animal production is now hoped for, to result in greater efficiency by the transition to regional forms of the organization of production and labor. Regional departments, to be established if at all possible at village level, and in which several brigades of the two production types--crop and livestock--are to cooperate, are to lead to "sound collective labor." Moreover, cooperation councils at enterprise level, now equipped with greater powers, are to ensure smooth cooperation by the two types of production. Still, the departments for agriculture and the food industry at the local state organs, especially at kreis level, will be responsible for making sure that these "powers" do not get out of hand.

The GDR economic leadership appears to have begun to appreciate that the main current problems of its agrarian output have arisen primarily by this intervention in the management organizational linkage between crop production (primary production) and animal husbandry (secondary production). While contractual agreements on the exchange of services between the two kinds of enterprises were to replace the loss of the internal enterprise linkage by offering a cooperative linkage, this latter has definitely not managed to compensate for the disadvantages. This holds true especially for feed management.

Some 70 years ago, Theodor Brinkmann described the effects of natural and operational conditions on the management organization of agriculture.<sup>3</sup> Ever since the reasons for internally linked production may be looked up in any proper textbook of farm management.

In addition to the above mentioned aspect of reducing the weather related production risk, the most important reasons for linked production are the following:

- The need to preserve soil fertility;
- The need to balance labor, and
- The need to balance feed.

The neglect of precisely these management principles--relating to soil biology, labor and feed--by the highly specialized large-scale socialist enterprises in the GDR has resulted in the serious problems counteracting the desired rise in crop and animal product output. Last year's symposium of our research agency already discussed in great detail the major difficulties impeding the increase in the volume yield of farm production and the improvement of agricultural labor productivity in the GDR due to reduced soil fertility, while the inadequacy of the production and procurement of basic feed and protein feed hinders the full development of the livestock potential. We may therefore omit any further discussion of these problems this time.

In conclusion, the attached selection of farm statistics provides a complete survey of the development of the most important sectional production and productivity performances of GDR farming. The statistics also include the corresponding performance dimensions of the farm sector in the FRG and enable us to draw comparisons from various aspects. I will refer here only to the areal and labor productivity of agriculture, because the production performances of agriculture in the inner-German comparison are to be reported on separately in one of the coming issues of FS-ANALYSEN.

Despite the generally lower standard in the GDR, the growth rates for both kinds of productivity were much lower there in 1967-1981 than in the FRG. The relative annual growth of gross crop production per unit of area was 0.97 percent in the GDR, no more than about half the growth in the FRG (1.89 percent). Farm labor productivity increased by 62 percent in the GDR from 1967 to 1981, by some 122 percent in the FRG. The annual average rate of growth in these 15 years amounted to 3.57 percent in the GDR, 5.77 percent in the FRG. The GDR's soil productivity is currently around three quarters of the FRG's, its labor productivity about half.

These figures must be seen against the background of the enormous efforts made in the GDR to improve the farm situation with regard to yields. Still, when we sum up the insecurities and hazards of agrarian policy and agriculture in the GDR as discussed earlier, the measures adopted until now to tackle the reform of the economic failures of industrialized farm production appear as mere patchwork. No incentives for improved output and productivity increases are to be expected from these measures in the foreseeable future.

#### FOOTNOTES

1. Karl Hohmann, "Agrarian Price Reform as a Production Stimulant?", will be published in the next issue of FS-ANALYSEN.
2. Endre Antal, "The Reform of the Control Mechanisms for the Hungarian Agriculture," OSTEUROPA No 8/1977, pp 697 f; Endre Antal and Guenter Jaehne, "Agrarian Production and Food Consumption in Hungary," No 10 of the series of publications issued by the Federal Ministry for Food, Agriculture and Forestry, Series C, "Agropolitical Reports by the Organization for Economic Cooperation and Development (OECD)," Muenster-Hiltrup 1981; Karl-Eugen Waedekin, "The Future of Farming in Eastern Europe," NEUE ZUERCHER ZEITUNG, foreign editions No 192, 20 August 1983, p 13, No 195, 24 August 1983, p 14, No 197, 26 August 1983, pp 13/14, No 201, 31 August 1983, p 11 and No 202, 1 September 1983, p 15.
3. Theodor Brinkmann, "The Management of the Agricultural Enterprise," Special Issue, Tuebingen 1914; reprinted in "Grundriss der Sozialoekonomik" /Outline of Social Economics/, Dept VII, Tuebingen 1922, pp 27-124.

Hectare Yields of the Most Important Field Crops in the GDR and FRG (1935/1938, 1957/1961, 1967/1971, 1972/1976, 1977/1981--in decitons)

(1) Fruchtarzt	Ø 1935/38 <sup>1)</sup>	Ø 1957/61	Ø 1962/66	Ø 1967/71	Ø 1972/76	1977	1978	1979 <sup>2)</sup>	1980	1981
(13) D R										
(2) Getreide insgesamt	23,9	24,4	26,7	31,3	35,9	34,5	38,6	35,6	31,8	35,7
(3) dar. Weizen	28,4	31,0	32,7	38,0	39,9	39,8	45,9	43,8	43,8	43,6
(4) Roggen	19,5	20,7	21,8	24,7	27,5	26,6	29,1	27,0	28,3	27,4
(5) Gerste	27,0	27,9	30,8	33,5	40,2	36,9	40,0	35,2	41,1	36,0
(6) Hafer	25,5	25,0	27,2	31,6	34,2	26,9	39,0	39,1	37,5	34,8
(7) Körnermais	29,2	21,6	20,3 <sup>3)</sup>	26,3	32,4	47,5	34,3	46,9	44,9	44,6
(8) Kartoffeln	194,3	161,2	177,2	176,4	165,6	175,6	186,3	222,9	179,7	205,6
(9) Zuckerrüben	301,2	261,6	262,6	298,6	265,9	319,1	289,6	263,4	281,0	307,6
(10) Runkelrüben	463,4	469,7	522,2	605,1	615,7	683,3	604,5	577,8	483,9	613,2
(11) Klee und Luzerne										
(Heuwert)	55,5	58,9	61,3	68,5 <sup>4)</sup>	78,2 <sup>5)</sup>	101,0	86,3	90,3	105,9	104,7
(12) Wiesen (Heuwert)	42,9	43,7	40,3	46,9	56,8	73,1	66,2	70,0	68,1	70,9
(14) B R Deutschland										
(2) Getreide insgesamt	22,4	28,0	20,7	36,8	39,5	40,9	44,9	43,7	44,3	44,5
(3) dar. Weizen	24,5	31,6	33,9	41,6	43,7	45,3	50,1	49,5	48,9	51,0
(4) Roggen	20,1	25,8	27,7	33,0	34,3	36,2	37,8	37,5	38,4	35,7
(5) Gerste	23,2	28,5	31,2	36,2	39,5	41,9	44,1	41,2	44,1	42,5
(6) Hafer	22,8	26,1	29,5	34,0	36,1	43,2	42,7	41,7	41,1	39,3
(7) Körnermais	29,8	29,7	36,2	50,1	50,3	58,2	54,7	64,2	57,5	64,8
(8) Kartoffeln	185,0	223,9	254,0	283,0	280,2	284,3	295,7	316,0	259,4	308,9
(9) Zuckerrüben <sup>6)</sup>	317,3	391,1	390,0	463,8 <sup>7)</sup>	450,2	487,8	466,8	466,4	483,7	548,4
(10) Runkelrüben	436,2	483,1	501,0	887,1	903,8	1036,9	967,1	997,9	930,1	1090,8
(11) Klee und Luzerne										
(Heuwert)	63,8	70,5	70,1	78,2	75,6	77,7	82,4	83,6	81,3	85,3
(12) Wiesen und Mähweiden (Heuwert)	48,2	57,6	59,9	67,7	67,3	72,0	74,9	76,6	75,3	78,4

1) Bei Getreide und Kartoffeln einschließlich Zuschlag von 10 vH zur amtlichen Ernteschätzung. - 2) Ab 1979 sind die Hektarerträge in der BR Deutschland infolge geänderter Erfassungsgrenzen der Bodennutzungshaupterhebung mit den Werten bis 1978 nicht voll vergleichbar. - 3) Durchschnitt der Jahre 1962, 1963 und 1966, da für 1964 und 1965 Angaben fehlen. - 4) Ab 1969 einschließlich Kleegras. - 5) Ab 1976 einschließlich gemästter Anbau von Luzerne und Gras. - 6) Gemäß Statistik der Rübenanlieferung an Zuckerfabriken und Zuschätzung durch BM. - 7) Ab 1968 neue Berechnungen aufgrund ergänzender Erntemittelungen.

Quelle: DDR = Statistisches Jahrbuch der DDR 1982 und vorhergehende Jahrgänge; BR Deutschland = Statistisches Jahrbuch über ELU 1982 u. vorhergehende Jahrg.

Key:

1. Type of crop	8. Potatoes
2. Cereals, total	9. Sugar beet
3. Wheat	10. White beet
4. Rye	11. Clover and alfalfa (hay value)
5. Barley	12. Meadowland (hay value)
6. Oats	13. GDR
7. Corn	14. FRG

Footnotes: 1) For cereals and potatoes including 10 percent addition to the official harvest estimate.-- 2) From 1979 on FRG hectare yields are not fully comparable with the values up to 1979, due to changed compilation limits of the main land use inquiry.-- 3) Average of 1962, 1963 and 1966, because data are lacking for 1964 and 1965.-- 4) From 1969 clover only.-- 5) From 1976 including mixed cultivation of alfalfa and grass.-- 6) According to the statistics of beet deliveries to sugar factories and additional BML /Federal Ministry for Agriculture/ estimate.-- 7) From 1968 new calculations based on supplementary harvest information.

Sources: GDR: "Statistisches Jahrbuch der DDR 1982" /1982 GDR Statistical Yearbook/ and the corresponding volumes for the preceding years; FRG: "Statistisches Jahrbuch ueber ELuF 1982" /1982 Statistical Yearbook for European Agriculture and Forestry/ and corresponding volumes for the preceding years.

0 1957/61, 0 1962/66, 0 1967/71, 0 1972/76, 1977 bis 1981

(13)

Art der Leistung	Einheit	0 1957/61	0 1962/66	0 1967/71	0 1972/76	1977	1978	1979	1980	1981
(17) D R										
(2) Rinder:										
(3) Milchertrag <sup>1)</sup> je Kuh kg	2 627	2 778	3 304	3 701	3 714	3 853	3 873	3 923	3 872	3 872
(4) Fleischleistung je Tier <sup>2)</sup> kg/LG	80	92	112	125	121	124	120	117	117	121
(5) Lebendgewicht je geschlachtetes Rind (ohne Kälber) kg	332	337	384	417	415	408	405	411	403	403
(6) Kalb kg	62	68	97	100	91	95	92	92	83	83
(7) Schweine:										
(8) Fleischleistung je Tier <sup>2)</sup> kg/LG	104	101	113	121	122	122	122	125	125	128
(9) Lebendgewicht je geschlachtetes Schwein kg	121	118	116	121	121	118	119	121	121	118
(10) Umtrieb des Bestandes <sup>3)</sup> (15) VH	85	86	98	100	101	104	103	103	103	108
(11) Hühner:										
(12) Legeleistung je Henne <sup>2)</sup> (16) Stück	132	137	164	189	200	199	197	205	210	210
(18) BR Deutschland										
(2) Rinder:										
(3) Milchertrag je Kuh kg	3 332	3 561	3 783	3 974	4 181	4 305	4 396	4 548	4 540	4 540
(4) Fettgehalt der Milch (15) VH	3,72	3,76	3,77	3,82	3,92	3,84	3,84	3,84	3,84	3,84
(3) Milchertrag je Kuh kg	3 541	3 826	4 075	4 338	4 563	4 723	4 823	4 990	4 981	4 981
(4) Fleischleistung je Tier <sup>2)</sup> kg/LG	143	149	161	174	168	181	182	187	177	177
(5) Lebendgewicht je geschlachtetes Rind (ohne Kälber) kg	493	498	511	530	540	550	555	555	550	550
(6) Kalb kg	81	101	125	149	170	176	181	181	180	180
(7) Schweine:										
(8) Fleischleistung je Tier <sup>2)</sup> kg/LG	152	158	162	165	162	167	167	170	168	168
(9) Lebendgewicht je geschlachtetes Schwein kg	113	113	112	109	107	107	107	106	106	106
(10) Umtrieb des Bestandes <sup>3)</sup> (15) VH	134	140	145	149	151	156	156	159	159	159
(11) Hühner:										
(12) Legeleistung je Henne <sup>2)</sup> (16) Stück	145	188	214	234	242	241	242	242	243	243

1) Auf der Basis von 3,5 VH Fettgehalt. - 2) Bezogen auf den Durchschnittsbestand. - 3) Schlachtungen in VH des Durchschnittlichen Schweinebestandes. - 4) Vorläufig.

Quelle: Statistisches Jahrbuch der DDR 1982 und vorhergehende Jahrgänge; Statistisches Jahrbuch über Eluf der Bundesrepublik Deutschland 1980/81 und vorhergehende Wirtschaftsjahre; Die Futterwirtschaft in der Bundesrepublik Deutschland 1980/81 und vorhergehende Wirtschaftsjahre; Statistischer Monatsbericht des BMF 2/1983.

Key:

1. Type of production
2. Beef cattle
3. Milk yield per cow
4. Meat yield per animal
5. Live weight per slaughtered beef animal (excluding calves)
6. Calves
7. Pigs
8. Meat output per animal
9. Live weight per slaughtered pig
10. Stock turnover
11. Chickens
12. Egg output per hen
13. Unit
14. Kilogram live weight
15. Percent
16. Each
17. GDR
18. FRG
19. Butterfat content

Footnotes: 1) Based on 3.5 percent butterfat.-- 2) Related to the average stock.-- 3) Slaughterings as a percentage of the average pig stock.-- 4) Preliminary.

Sources: 1982 GDR Statistical Yearbook and corresponding volumes for the preceding years; 1982 FRG Statistical Yearbook for European Agriculture and Forestry and corresponding volumes for the preceding years; "Die Futterwirtschaft in der Bundesrepublik Deutschland 1980/1981" [The Fodder Industry in the Federal Republic of Germany 1980/1981] and the corresponding volumes for the preceding years; BML STATISTISCHER MONATSBERICHT No 2/1983.

### Agricultural Output of the GDR and FRG in Grain Units (1957/1961, 1962/1966, 1967/1971, 1972/1976, 1977/1981)

## Agrarproduktion der DDR und der BR Deutschland in Getreideeinheiten

Ø 1957/61, Ø 1962/66, Ø 1967/71, Ø 1972/76, Ø 1977/81, 1957 bis 1981

DDR = Kalenderjahre; BR Deutschland = Wirtschaftsjahre (bis einschließlich 1962/63 ohne Berlin).

- 1) Nach dem revidierten Getreideeinheitschlüssel (Stand 1970), veröffentlicht in Statistisches Jahrbuch über Ernährung, Landwirtschaft und Forsten der Bundesrepublik Deutschland 1982, S. 123.
- 2) Infolge Änderung der Bodennutzungshaupterhebung und der Ertragsschätzung für die Früchte, bei denen amtliche Ernteschätzungen nicht vorgenommen werden, ab 1979/80 mit den Vorjahren nicht vergleichbar.
- 3) Vorläufig.

Quelle: DDR = Eigenberechnung aus den regelmäßigen Teilstatistiken der pflanzlichen und tierischen Mengenerträge sowie der außenhandelsstatistischen Angaben, in: Statistisches Jahrbuch der DDR 1982 und vorhergehende Jahrgänge. Für die Ermittlung der tierischen Produktion aus eingeführten Futtermitteln sind zusätzlich die Angaben des Statistischen Bundesamtes, Fachserie F, Reihe 6, Warenverkehr mit der DDR und Berlin (Ost) sowie Angaben des U.S. Departments of Agriculture, Economics and Statistics Service, Eastern Europe Review of Agriculture in 1981 and Outlook for 1982 und vorhergehende, verwendet worden.

BR Deutschland = Statistisches Jahrbuch über ELUF der Bundesrepublik Deutschland 1982 und vorhergehende Jahrgänge; Statistisches Monatsbericht des BML 2/1983; E. Bittermann und M. Schmidt, Produktion und Wertschöpfung der Landwirtschaft in der BR Deutschland, in: Agrarwirtschaft, Jg. 32 (1983), H. 4; Die Futterwirtschaft in der Bundesrepublik Deutschland 1980/81 und vorhergehende Wirtschaftsjahre.

Key on following page

Key:

1. Calendar or financial year	6. Plants
2. Gross land output	7. Total
3. Food production	8. Animal
4. Livestock production from imported feed	9. GDR
5. Net food production	10. FRG
	11. Million tons GE <u>/grain units/</u>

Footnotes: 1) As per the revised grain unit key (status 1970), published in "Statistisches Jahrbuch ueber Ernaehrung, Landwirtschaft und Forsten der Bundesrepublik Deutschland 1982" /1982 FRG Statistical Yearbook on Nutrition, Agriculture and Forestry/.

2) Due to the change in the land use inquiry and the yield estimate for the crops not subject to official harvest estimates, not comparable with earlier years after 1979/1980.

3). Preliminary

Sources: GDR: My own computations from regularly published partial statistics of crop and animal yield volumes and the foreign trade statistical data in the 1982 GDR Statistical Yearbook and corresponding volumes for the preceding years. Additionally used for the ascertainment of livestock production from imported feeds are the data of the Federal Office for Statistics, Technical Series F, Series 6, "Goods Traffic with the GDR and East Berlin," as well as data from the U.S. Department of Agriculture, Economics and Statistics Service, Eastern Europe Review of Agriculture in 1981 and Outlook for 1982, and earlier publications.

FRG: 1982 FRG Statistical Yearbook on European Agriculture and Forestry and earlier publications; Federal Ministry for Agriculture, STATISTISCHE MONATSBERICHTE DES BML No 2/1983; E. Bittermann and M. Schmidt, "Production and Net Product of Agriculture in the FRG," AGRARWIRTSCHAFT, Series 32 (1983), No 4; "The Fodder Industry in the FRG 1980/1981" and earlier years.

The Share of Imported Feed in Agricultural Food Production in the GDR and FRG  
(1935/1938, 1957/1961, 1962/1966, 1967/1971, 1972/1976, 1977/1981, 1967/1981)

Kalender- bzw. Wirtschaftsjahre	(3)	(2) Anteil des Importfutters in vH der ...			
		tierischen Nahrungsmittelproduktion		gesamten Nahrungsmittelproduktion	
		(5) DDR	(6) BRD	(5) DDR	(6) BRD
1935/38		3	9	2	7
1957/61		17	12	13	10
1962/66		16	16	12	13
1967/71		17	20	13	16
1972/76		23	20	18	16
1977/81		21	23	16	18
1967		13	19	10	15
1968		13	19	10	15
1969		15	19	12	15
1970		24	21	19	17
1971		21	20	16	16
1972		27	19	21	15
1973		21	18	16	15
1974		18	18	14	15
1975		21	21	17	17
1976		30	24	24	20
1977		19	23	15	18
1978		19	23	15	18
1979		21	24	17	19
1980		25	22	20	18
1981		20	21	16	17

Key:

- 1. Calendar or financial year
- 2. Percentage of imported feed in..
- 3. Animal based food production
- 4. Total food production
- 5. GDR
- 6. FRG

Footnotes: Imported feed = imported feed and feed produced by processing imported agricultural raw materials; GDR = calendar years; FRG = financial years (up to and including 1962/1963 excludes Berlin)

Sources: Same as for the table "Agricultural Output of the GDR and FRG in Grain Units"

Area Productivity of Agriculture in the GDR and FRG (1935/1938, 1957/1961, 1962/1966, 1967/1971, 1972/1981)

(1) Jahr <sup>1)</sup>	(2)			(3)		
	(4) DDR	(5) BRD	(6) DDR in vH BRD	(4) DDR	(5) BRD	(6) DDR in vH BRD
Ø 1935/38	30,5	28,2	108	22,4	20,9	107
Ø 1957/61	28,3	32,2	88	22,2	29,7	75
Ø 1962/66	29,4	34,0	86	22,8	31,4	73
Ø 1967/71	33,0	39,7	83	26,2	35,0	75
1972	37,8	41,5	91	25,9	37,1	70
1973	35,7	43,2	83	28,3	38,7	73
1974	39,3	45,4	87	31,3	39,1	80
1975	34,3	44,4	77	30,3	38,7	78
1976	30,1	39,8	76	27,1	37,1	73
1977	38,2	46,3	83	30,9	40,5	76
1978	37,8	47,6	79	31,7	42,3	75
1979	36,9	49,6	74	30,6	45,4	67
1980	38,1	48,8	78	30,6	46,6	66
1981	38,3	51,8	74	32,4 <sup>4)</sup>	46,8 <sup>4)</sup>	69 <sup>4)</sup>

Key:

1. Year
2. Gross land production per hectare LN /agricultural area/ in decitons GE (area productivity of crop production)
3. Net food production per hectare LN in decitons GE (area productivity of the entire agrarian production on the basis of the respective land)
4. GDR
5. FRG
6. GDR as a percentage of the FRG

Footnotes: 1) GDR = calendar years; FRG = financial years.-- 2) In the FRG from 1970/1971 agriculturally used area (LF), from 1979/1980 comparable with the earlier years to a limited extent only, due to the change in the main land use inquiry and the yield estimate for crops not subject to official harvest estimates.-- 3) From 1957/1961 as per the revised FRG grain unit key (1970).-- 4) Preliminary.

Sources: See table "Agrarian Production of the GDR and FRG in Grain Units"

Food Production, Manpower and Labor Productivity in the GDR and FRG (1964-1981)

Jahr <sup>1)</sup>	(1)		(2)		(3)		(4)	
	Nahrungsmittelproduktion		Arbeitskräfte <sup>2)</sup>		Arbeitsproduktivität <sup>3)</sup>			
	(5) DDR	(6) BRD	(5) DDR	(6) BRD	(5) DDR	(6) BRD	(7) DDR	
	(8) Mill. t GE	(9) 1000 AK-Einheiten			(10) dt GE		in vH BRD (=100)	
1964	16,38	52,19	952	1924	172,0	271,3	63,4	
1965	17,49	49,84	938	1857	186,5	268,4	69,5	
1966	18,16	52,23	925	1810	196,5	288,6	68,1	
1967	18,76	55,43	908	1724	206,7	321,5	64,3	
1968	19,35	56,57	871	1636	222,0	345,8	64,2	
1969	18,76	57,19	843	1582	222,5	361,5	61,5	
1970	18,85	58,36	817	1458	230,7	400,2	57,6	
1971	19,41	58,40	801	1359	242,5	429,7	56,4	
1972	20,69	58,97	772	1289	268,0	457,5	58,6	
1973	21,32	60,91	751	1224	284,1	497,6	57,1	
1974	22,89	61,10	737	1183	310,6	516,5	60,1	
1975	22,99	61,78	728	1154	315,9	535,3	59,0	
1976	22,36	61,32	711	1110	314,7	552,4	57,0	
1977	22,78	65,24	706	1070	322,7	609,7	52,9	
1978	23,28	68,38	709	1033	328,4	662,0	49,6	
1979	23,03	69,23	712	997	323,4	694,4	46,6	
1980	23,94	69,49	715	981	335,0	708,3	47,3	
1981 <sup>4)</sup>	24,16	68,83	720	963	335,8	714,8	47,0	

Key:

- 1. Year
- 2. Food production
- 3. Labor force
- 4. Labor productivity
- 5. GDR
- 6. FRG
- 7. GDR as a percentage of the FRG  
(= 100)
- 8. Million tons GE
- 9. 1,000 worker units
- 10. Decitons GE

Footnotes: 1) GDR = calendar years; FRG = financial years.-- 2) AK units (worker units) are based on: GDR = permanently employed persons (excluding apprentices) in agriculture (excluding forestry, the veterinary system and plant protection or agrochemical centers) as per 1982 GDR Statistical Yearbook, p 174, converted by the 0.9 conversion factor used in the GDR to calculate worker units; FRG = AK in agriculture (including city Laender) as per BML estimates.-- 3) Food production per AK unit.-- 4) Preliminary

FUNCTIONS OF NATIONAL SAVINGS BANK DESCRIBED

Budapest PENZUGYI SZEMLE in Hungarian No 3, Mar 84 pp 211-214

[Transcript of a lecture delivered by N.S.B. Chairman Dr Jeno Szirmai on 26 January 1984]

[Text] The National Savings Bank designed its 1983 tasks--in accordance with the goals and requirements set forth by the national economic plan--in pursuit of the threefold purpose, i.e. to contribute to a better balance between purchasing power and the stock of goods at hand, to shape consumption according to the provisions and to increase the receipts of the treasury. The bank implemented and in some cases even surpassed these pro-positions serving thereby the aforementioned purposes.

On the Development of the Deposits

The total sum of moneys deposited by the population increased last year by approximately 21.5-22 billion forints, reaching and even exceeding 197 billion. (A few comparative statistics concerning last year's business: The increase in deposits was in 1980 9.4 billion forints, in 1981 14.8 billion and in 1982 15.6 billion).

This conspicuous increase in the deposits handled by the savings banks, the post offices and the savings cooperatives was the result of various factors. One of these was that the total income of the population exceeded that of the previous year by about 8 percent. The turnover in foreign trade grew at a more moderate pace. But another factor in the increase of the deposits was the growth of the purpose-bound savings. It is well known that the building and purchase of apartments require savings over a rather extended period of time. On the other hand the fact that the waiting time for cars grew longer produced a growth in the number of advance orders and increased the total amount of advances deposited. (At the end of 1983 there were 192,000 deposits for the purchase of automobiles.).

The apartment-applications deposit introduced last year, caused 155,000 new deposits in the amount of 900 million forints. Another category of deposits, also introduced last year, i.e. the apartment savings deposits, further expanded the goals and possibilities of savings. (For the time being 2,700 such accounts are handled by the N.S.B.)

The growth of the total sum of deposits was also enhanced by the increase in the transfer deposits. At present 560,000 transfer deposits are handled by the bank in comparison with 500,000 in 1983. According to the records established at the end of last year the bank transfers regularly the wages of 60,000 workers and the pensions of 62,000 retirees, entirely or in part defined by the beneficiaries, directly to their accounts. (The monthly amount transferred to accounts of employees and retirees averaged a per capita 2,300 forints.)

The interest rates of two kinds of deposits, i.e. that of the youth deposits and the savings letters, have been increased by the financial administration in the beginning of 1983. Last year the number of youth deposits grew from 500,000 to 605,000 and their total sum reached 7 billion forints. Customers have thus far bought 540,000 savings letters, the amount of which is 10 billion forints.

The number of communal bonds is 23,000 and their total amount is 35 billion forints. In the Mutual Savings Bank 100,000 workers have savings; they have deposited 4.7 billion forints during 1983.

Earlier the interests on savings letters and on youth savings deposits were settled only when the deposit was cancelled, now they are credited yearly. The first time this happened was on 1 January 1983. The savings banks paid then retroactive interests on the mentioned two deposits for the amount of 1.2 billion forints. Thus the year of 1983 should be considered as irregular and special from this vantage point. Moreover the amount of capitalized interests contributed significantly to the growth of the sum-total of the deposits.

As a result of the more advantageous possibilities of savings deposits in foreign currencies for both Hungarian and foreign citizens and the increase in the rates of interests, the amount of such deposits grew in 1983 more than during previous years. The growth was 1.1 billion forints in that year and the year's end balance amounted to 3.1 billion. The rate of saving surpassed that of the previous year and grew 4.8 percent.

#### The Building and Sale of Apartments

The year of 1983 brought about new financial and credit conditions for the building and purchase of housing. The new rules are properly implemented in practice and they constituted the basis for the complex and important functions of loans on housing. The changes took place smoothly due, in addition to the professional preparatory work of the savings banks, to the timely and continuous information of the population.

As a result of the new credit conditions, the interest of the population shifted toward the building of family homes. Comparative statistics show clearly this change. Earlier the N.S.B. granted loans only for 30,000-32,000 one family houses per year, while last year the construction of 45,000 houses could be started with the help of credits. The explanation of this trend is that the conditions for building family homes have improved the most conspicuously.

They have been included into the category of constructions with social-political advantages, the rates of interest have been decreased and the length of credits extended. Moreover the maximum amount of favorable loans has been significantly increased in accordance with the size of the family.

Regarding constructions completed during 1983, the National Savings Bank supported financially the building of 69,700 housing units, of which 31,000 were one-family homes and 5,000 apartments in condominiums. The N.S.B. also built 18,700 condominium apartments with its own funds. The number of apartments built by the local councils was 15,000.

The bank invested last year 28 billion forints in building loans and credits for the purchase of apartments and real estates. Thus the total of longterm outlays rose, as a result of an investment of 20 billion forints during the year to 140 billion by the end of 1983. During last year also another source of credit emerged, namely the bank-loan which acquired certain importance in private transactions, particularly in deals between private citizens concerning sale and purchase of homes.

#### Other Private Credits

The liabilities of the population for credits amounted, at the end of 1983, to 154 billion forints. The growth during the year was 21 billion. Medium and short-term credits were granted to 1.5 million applicants for the amount of 18 billion. Within this sum there were 670,000 individual loans granted for the purchase of commodities for a cost of 10 billion forints. Young married couples and young depositaries purchased 65,000 items for two billion forints, with the help of favorable credits. One third of the durable goods sold nationwide was purchased with commodity credits.

There was a further growth in the demands for production credits. Our network of financial institutions granted 165,000 loans for an amount of 2.3 billion forints to small farmers. Individual and joint entrepreneurs took advantage of 6,000 loans amounting to 600 million forints. Personal loans have been granted to 750,000 applicants for an amount of 5.3 billion forints.

#### Foreign Exchange, IKKA, Toto-Lotto

The National Savings Bank provides Hungarians, who travel abroad, with foreign exchange and changes the money of foreign citizens who arrive here. Last year the bank made business with almost two million persons for a value of 3.3 billion forints.

The foreign donation action keeps in the framework of the IKKA [Foreign Trade Enterprise] foreign currency accounts of both Hungarians and foreign citizens and undertakes private export-import transactions against the payment of foreign currency. The yearly turnover of this service reaches 10 million dollars.

The sale of the toto [football pool], lottery, and raffle tickets shows a further growth. People have bought about 860 million tickets. The betters

obtained gains in money and goods for about two billion forints. The treasury raped a receipt of approximately 1.8 billion forints from these lotteries.

#### The Banking Activities of the Councils

The N.S.B. being the bank of not only the population but also of the local councils, complied successfully also last year with its tasks as the financial institution of these organizations. The councils did business last year with more than 130 billion forints. They used 84 billion for their own and their institutions' functions. Their development expenditures amounted to 33.5 billion forints. They invested in the construction of housing almost 9 billion and in the reconstruction of hospitals 2.5 billion, and contributed with a significant amount to the development of the network of schools.

The National Savings Bank helped the implementation of the councils' plans with credits. It contributed to their administrative expenses with 370 million, to their housing projects with loans totalling 2.3 billion and provided an advance payment of 460 million forints on a development fund to be created at a later date. Moreover the N.S.B. granted a loan of 600 million forints to the water-work companies for building watersupply systems and canals.

#### The 1984 Plans and Goals

The National Savings Bank expects this year a growth of 17 billion forints in the savings deposits of the population. In addition to collecting the people's savings, our financial institutions are trying to increase the durability and delay the forfeiture of the deposits.

Regarding deposits collection, the banks tend to devote particular attention to the dissemination of cultured forms of money management, preferring ways and means advantageous for both the population and the national economy, such as the transfer deposits, direct transfer of wages, and pensions and savings checks. They consider it as their foremost task to increase the number of youth deposit contracts, which serve to some extent as the financial basis of young persons' start of an independent life.

When reckoning with a less conspicuous increase in the deposits than last year, the banks are taking into consideration the more difficult conditions of livelihood. However the N.S.B. counts with the impact of the crediting of accumulated interests, in approximately the same amount as at the end of 1983, and with the incentive exerted by the increase in the interest rates upon people's willingness to deposit money. As it was made public last December, the interest rates on youth deposits, apartment savings deposits and savings letters have been increased if these deposits have a longer period of maturity. And beginning on March 1, 1984 new forms of deposits will be introduced, i.e. on non-demandable deposits over two years 6 percent and over three years 7 percent interests will be paid.

According to plans, the National Savings Bank will grant long-term loans for 31 billion forints and medium and short-term credits for 18 billion forints.

The number of such loans is expected to be 180,000 and 1.6 million respectively. Taking into account the present liabilities of the population and the possible size of repayments, the outstanding credits are expected to grow by 23 billion forints to 177 billion.

In this connection the question may arise: Does the savings bank take into consideration the hike in the prices of construction materials when granting housing loans? Our financial institution, the National Savings Bank, reckons with this circumstance. For one thing the average amount of loans granted on the basis of individual creditworthiness will certainly increase. On the other hand it is well known that the socio-political allowance granted for children and other dependents will grow by 10-10,000 forints with retroactive effect to 1 January 1984 (for children from 30,000 to 40,000 and for other dependents from 20,000 to 30,000 forints).

According to the plans the National Savings Bank will provide long-term loans for the construction of 35,000 one-family homes and 6,000 condominium apartments, will build 18,000 apartments as its own investment, and the councils will contribute with 11,000 apartments. Taken all this into consideration 70,000-71,000 housing units are expected to be completed with the cooperation of the bank this year. Moreover due to the revival of the real estate market and the quickening pace of apartment exchanges, the N.S.B. counts this year with the repurchase and sale of about 8,000 apartments. However aside from this the bank actively supports the preservation, renovation, modernization and the making more comfortable of the existing apartments.

We have also to mention that this year we expect certain development in a new business venture, i.e. trade in real estate by the savings banks. Through this business activity many real estates may be sold and bought. The amount of credit required for this kind of business is an estimated 2 billion forints. In this area we have to reckon with the intensification of demands for bank loans.

We have the necessary coverage for an increase in medium and short-term credits. The increase is expected to be 800 million forints. From this amount 350 million will be used by applicants for commodity credits. 2 billion forints will be granted by the National Savings Bank for production credits, this means an increase of 400 million in this sector. The N.S.B. will continue to support the household and auxiliary farms, as well as some individual and joint undertakings.

The N.S.B. also established its Office for Undertakings as a new business branch. The office will start its activities this year. Thus the N.S.B. does not only grant credits but also participates in enterprises with its own capital.

The bank further expects a 7 percent increase in the foreign exchange turnover, a receipt of 10.6 million dollars through IKKA and an income of 4.2 billion forints to be earned through the sale of toto, lotto and raffle tickets.

POLL TESTS FOR LINK BETWEEN PRODUCTIVITY, WORK FORCE SHRINKAGE

Warsaw ZYCIE GOSPODARCZE in Polish No 10, 4 Mar 84 p 10

[Article by Tadeusz Smuga]

[Excerpts] In 1983, two phenomena occurred which are worth noting and which deserve more thorough analysis: the labor productivity index rose and employment fell. These trends could be regarded as very desirable if there were a proper correlation between them. However, this is not the case.

Within the framework of trisectional studies concerning the functioning of the economic reform in the major areas of enterprise activity (we presented these studies in the columns of ZYCIE GOSPODARCZE), the Institute of the National Economy also submitted the management of work resources for evaluation last year. Above all, the following question was asked: How do enterprises assess the changes carried out in the systems of wages?

Utilized Possibilities

The regulations of Resolution No 135 of the Council of Ministers with regard to industry and of Resolution No 60 of the Council of Ministers pertaining to the building industry, which were introduced in 1982, were in force in enterprises during the period under study.\*

Thirty-two industrial enterprises evaluated interior changes of the functioning systems of wages as significant. Most frequently, these changes amounted to the preparation of new, plant wage tables and increasing the share of basic wages in emoluments as a result of incorporating certain movable elements into them, such as permanent allowances arising from social agreements, regulated bonuses or bonuses for quality of production and task bonuses. All kinds of bonuses were also created for time used efficiently on the job, for work attendance, and bonuses of recognition were also set in motion. These changes were introduced, above all, during the second half of 1982. In 1983,

---

\*Resolution No 135 of the Council of Ministers dated 28 June 1982, regarding the adaptation of certain principles governing remuneration for workers in state enterprises to the economic reform (MONITOR POLSKI 1982, No 17). Resolution No 60 of the Council of Ministers dated 19 March 1982, regarding the principles of remuneration for workers in construction-assembly enterprises (not published).

their correction was most frequently carried out by raising the workers' classification scale and by increasing the coefficient of awarding bonuses.

In the opinion of the 12 remaining industrial enterprises, the changes in the internal systems of emoluments were not significant. They boiled down to, in their opinion, a modification of the existing systems. This is how the introduction of plant wage tables and the inclusion of certain bonuses and allowances to basic wages was viewed.

The evaluation of changes which were introduced by Resolution No 60 of the Council of Ministers into the systems of emoluments in construction-assembly enterprises was also divergent. For five of the enterprises, the changes which were brought about were significant because they made possible a change in the wage scale, a change in the system of bonuses and a departure from the piece-work system in favor of wages per day's work. The remaining five enterprises claimed that the system had not undergone any substantial changes.

Nevertheless, in these cases as well, changes above all in the scale of wages and bonuses were introduced.

Not all the enterprises surveyed with regard to changing the system of emoluments went to the trouble of reforming defectively functioning work standards. Only 26 industrial and construction-assembly enterprises (48 percent) straightened out or tried to straighten out the work standards in force (as a rule, they were raised). In one instance (a machine-building industry enterprise), standards were corrected "downward"--where production was less than 100 percent. In two enterprises of the iron and steel industry, the application of standards was abandoned in favor of a system of unit prices.

In the remaining enterprises (28), nothing was done in this regard. Following is a selection of the most representative examples of the motivation behind such a position: "How can we talk about straightening out work standards when the personal classification rates do not correspond to reality?" (they are too low--author's note) (quote from an enterprise of the fine ceramics industry); "Resolution 135 was introduced so quickly that there was no time to regulate work standards, especially to verify those standards which require an analysis of the whole technological standard base" (quote from a machine-building enterprise); "Reforms were not carried out because of the low level of their [work standards] transgression" (quote from a metal industry enterprise). The table below illustrates the average degree to which work standards were carried out.

Average Degree of Implementing Work Standards  
During the First Half of 1983

Number of Enterprises	Degree to which work standards were carried out in %				
	100-120	121-140	141-160	161-180	181-200
	14	13	14	10	3

The highest degree of implementation, frequently up to 400 percent, characterized work standards in force in loading and overhaul-installation work.

In three enterprises representing the textile industry, a significant rise (approximately 50 percent) was observed in the average degree to which work standards were carried out during the first half of 1983 as compared to 1982.

At the beginning of this year, 19 industrial enterprises possessed the ability to reclassify all workers (most frequently by category) within the framework of wage rates adopted on the basis of Resolution 135 of the Council of Ministers. In the remaining industrial enterprises such a possibility no longer existed. Twenty-one enterprises were able to raise the rates of only those in certain job positions because a maximum classification rate (40 zlotys per hour) had already been granted at the time that the resolution went into effect to those workers who were most significant in the functioning of the enterprise or whose shortage was felt most intensely.

Thus, for example, in enterprises of the food industry, maximum wage rates were granted to all workers; in the fine ceramics industry--to nonpiecework workers, i.e. to workshops and production control, and in the textile industry--to dyers and mechanical-power services. The remaining four enterprises, which represent mainly the machine-building industry, granted the maximum rates to all workers, within the framework of individual classification categories, at the moment that Resolution 135 went into effect.

A similar situation also took place in construction-assembly enterprises. In principle, all enterprises took advantage of the possibility of raising the personal classification rates for workers as early as in the beginning of this year. Where it was impossible to raise personal classification rates for workers, the coefficient of awarding bonuses was most frequently raised or new bonuses were put into effect.

#### A Shortage of Working Hands

In analyzing the information obtained from enterprises, it is possible to come to the conclusion that the curtailment of production growth shifted greatly from the raw materials supply sphere to the field of employment. Forty-four enterprises reported that they had noted a drop in employment which in turn had an effect on the production process. A constant drop in employment which largely concerns qualified workers directly involved in production is primarily caused by noncompetitive working conditions with respect to other enterprises, i.e., lower wages and a lack of building intended for export, natural traffic, etc., in the case of construction-assembly enterprises. A large number of workers take up work in various trades or in Polonia firms.

In nine enterprises employment became stabilized at the 1982 level while in one case (an enterprise of the food industry), as a result of a drop in production (shortage of slaughter livestock), employment was lowered on the enterprise's own initiative.

In the face of a situation in which there was a shortage of workers, enterprises took a series of steps which were intended on the one hand to halt the drop in employment by creating incentive systems with wage priorities for workers directly involved in production, and, on the other hand, to attract

new workers through the training of future workers within the framework of the OHP [Volunteer Labor Brigades] and through recruitment in post-elementary schools, and also by employing retirees and pensioners within the framework of job orders.

At the same time, all the enterprises confirmed that they have a surplus of middle production workers but that none of them [enterprises] has introduced, within the framework of the internal improvement of the employment structure, drastic solutions, for example, in the form of laying off white-collar workers. Instead, internal employment quotas were created in indirect production services. The advancement of workers employed there was contingent upon the implementation of these quotas.

The need for eliminating mandatory work intervention was stressed by enterprises as being among external actions which could improve the employment situation. The interference of the Employment Department in plant policies was given a negative evaluation. Following are the opinions of some enterprises: "There is a need for changing the profile of the activity of the Employment Department which should mainly fulfill functions which inspire training activity--by no means should it carry on activity as a distributor of work resources" (an enterprise of the machine-building industry); "Increasing the powers of the Employment Department will not improve the situation on the job market, while experience of past years proves that it is incapable of conducting proper policies with positive results for the country and for the enterprise..." (a construction-assembly enterprise); "After the introduction of the mandatory intervention of the Employment Department, the flexibility of employment policies came to an end in the enterprise" (food industry).

Aside from this, enterprises see the need here for introducing a uniform system of wage policy on a national scale and the creation of competitive wage conditions because of the arduousness of work. They also stress the need for restoring social standing to certain occupations, for example, to metallurgists, and propose that wage disparity between the socialized and nonsocialized sector be evened out.

The surveyed enterprises were asked by what percent they would increase production given the current rate of employment if they were assured a complete supply flow of raw and other materials. Thus, it turned out that, given such formulated conditions, a rise in production would be possible in as many as 22 enterprises. This would constitute an increase in production of 10 to 15 percent (11 enterprises). The remaining 32 enterprises reported that the raw and other material supply flow is sufficient but that the main problem lies in employment.

Therefore, we are dealing with two interrelated phenomena: an increase in labor productivity and an increasing drop in employment. The survey results show, however, that it is not increased labor productivity that has an effect on declining employment but conversely, the drop in employment was the main factor which forced an increase in productivity. At the same time, the attainment of this increase attests to the existence of considerable overemployment--contrary to the opinion of the enterprises.

This conclusion is brought about by the fact that an increase in labor productivity in 1983 occurred without the intensification of factors which motivate in that direction. The liabilities on PFAZ [State Vocational Activation Fund] stopped being treated as severe owing to exemptions for increased production. In addition, it cannot be stated that some sort of new motivational factors have appeared in the systems of wages and bonuses. The majority of changes based primarily on increasing wage rates and on introducing new regulations for bonuses had already been implemented in the second half of 1982.

On the other hand, in 1983 the possibilities of increasing wages were totally exhausted and bonuses for presence at work were put into practice more and more widely; at the same time, bonuses for quality were eliminated (by incorporation into basic wages). It is, therefore, difficult to acknowledge that the noted increase in productivity and drop in employment attest to improved management of work resources in enterprises.

This task is still before us.

9853  
CSO: 2600/738

FOREIGN TRADE, AFFAIRS MINISTRIES REPORT PERSONNEL CHANGES

Enterprise, Diplomatic Assignments

Warsaw RYNKI ZAGRANICZNE in Polish 2 Feb 84 p 8

[Excerpts] Effective 1 October 1983, Pawel Wronski, born 20 November 1949 in Warsaw, was appointed deputy director of the Currency Finance Office in the foreign-trade enterprise VARIMEX [Medical Equipment, Tools and Machines].

He is a graduate of the Main School of Planning and Statistics, began his professional career in 1969 and has been employed in the foreign-trade office since 1976. His former position was department manager in METALEXPORT [Machine Tools].

\* \* \*

Effective 4 October 1983, Jerzy Pawlowski, born 31 October 1929 in Denkow, was appointed commercial attache in the Embassy of the Polish People's Republic in Belgrade.

He is a graduate of the Main School of Planning and Statistics, and began his professional career in 1950. He has been employed in the foreign-trade office since 1964. His former position was deputy director general of CHZ [foreign trade agency] CIECH [Chemicals and Chemical Products].

\* \* \*

Effective 14 October 1983, Danuta Guszczar, born 13 December 1938 in Lubieszow, was appointed deputy director general of economic affairs and main comptroller in THZO [Local foreign-trade office] CONFEXIM.

She is a graduate of Lodz University and began her professional career in 1957. She has been employed in the foreign trade office since 1963. Her former position was department manager in TEXTILIMPEX [Textile Products and Raw Materials].

\* \* \*

Effective 16 October 1983, Maks Lech, born 23 February 1946 in Sosnowiec, was appointed deputy director of the Metallurgy Machine and Equipment Import and Export Office in CENTROZAP [Mining and Metallurgy Machinery and Equipment].

He graduated from the Czestochowa Polytechnic and began his professional career in the foreign-trade office in 1973. His last position was department manager in CHZ CENTROZAP.

\* \* \*

Effective 15 October 1963, Seweryn Pulawski, born 23 February 1951 in Warsaw, was appointed acting director of the Construction Materials Office in CEI MINEX [Minerals, Cement, Glass and Ceramics].

He is a graduate of the Main Office of Planning and Statistics and began his professional career in the office of foreign trade in 1974. He was last employed as department manager in CEI MINEX.

\* \* \*

Effective 15 October 1983, Jerzy Plewa, born 8 March 1934 in Izbica, was appointed commercial counsellor in the Embassy of the Polish People's Republic in Hanoi.

He is a graduate of Gdansk Polytechnic and the Main Office of Planning and Statistics. He began his professional career in 1959 and has been employed in the office of foreign trade since 1963. His former position was Vice Minister of Forestry and Timber Industry.

Director, Commercial Counsellor

Warsaw RYNKI ZAGRANICZNE in Polish 4 Feb 84 p 8

[Excerpts] Effective 15 October 1983, Ryszard Harhala, born 10 September 1937 in Komarno, was appointed deputy director general-commercial director in PHZ [foreign-trade enterprise] STALEXPORT [Iron and Steel Products].

He is a graduate of the Main Office of Planning and Statistics and began his professional career in 1961 [as published] and has been employed in the foreign-trade office since 1961. His last position was director, Office of Export of Metallurgy Products to the Capitalist Countries in PHZ STALEXPORT.

\* \* \*

Effective 15 October 1983, Zbigniew Faltus, born 15 May 1927 in Hoduciszki, was appointed commercial counsellor in the Embassy of the Polish People's Republic in Montevideo.

He is a graduate of the Higher School of Economics in Sopot. He began his professional career in 1944. He has been employed in the foreign-trade office since 1961. His former position was deputy director general of PHZ BALTONA [Ship Chandlers].

Foreign Trade Personnel

Warsaw RYNKI ZAGRANICZNE in Polish No 18-19, 11-14 Feb 84 p 8

[Text] Effective 17 October 1983, Janusz Bieszk, born 25 December 1948 in Wejherowo, was appointed director of economic affairs in PHZ BALTONA.

He is a graduate of Gdansk University and began his professional career in 1967. He has been employed in the office of foreign trade since 1967 and his former position was assistant department manager in PHZ BALTONA.

\* \* \*

Effective 17 October 1983, Jan Giezgala, born 19 July 1931 in Skarzysko-Kamienna, was appointed director of the Department of Economic Cooperation with the USSR in the Ministry of Foreign Trade.

He is a graduate of the Main Office of Planning and Statistics. He began his professional career in 1952. His former position was economic counsellor in the Commercial Counsellors Office of the Embassy of the Polish People's Republic in Moscow. He has been employed in the office of foreign trade since 1968.

\* \* \*

Effective 17 October 1983, Felicjan Wojcik, born 3 September 1938 in Myslowice, was appointed director of the CIECH-Graphic-Arts Paints Office in CHZ CIECH [Chemicals and Chemical Products].

He is a graduate of the Main Office of Planning and Statistics and began his professional career in 1962. He has been employed in the office of foreign trade since 1962. His former position was deputy director of the Ciech Graphic-Arts Paints Office.

\* \* \*

Effective 1 November 1983, Jerzy Borowski, born 20 February 1941 in Zyrardow, was appointed director of the Organization and Licensing Department in the Ministry of Foreign Trade.

He is a graduate of the Main Office of Planning and Statistics with a doctoral degree in economic sciences. He began his professional career in 1964 and has been employed in the office of foreign trade since 1983. His former position was adviser to the chairman of the Council of Ministers in the Council of Ministers Office.

\* \* \*

Effective 1 November 1983, Regina Omietanska, born 11 December 1932 in Ostrowy Gornicze, was appointed assistant to the main comptroller in PHZ STALEXPORT.

She is a graduate of the State Foreign-Trade High School and began her professional career in 1951. She has been employed in the office of foreign trade since 1951. She was formerly employed as department manager at PHZ STALEXPORT.

Attaches, Other Personnel

Warsaw RYNKI ZAGRANICZNE in Polish 16 Feb 84 p 8

[Text] Effective 5 November 1983, Jerzy Mikulski, born 25 February 1932 in Bialowieza, was appointed commercial attache in the Embassy of the Polish People's Republic in Prague.

He is a graduate of the Main Office of Planning and Statistics. He began his professional career in 1957 and has been employed in the office of foreign trade since 1961. His former position was chief specialist in the Trade Policy Department I, Ministry of Foreign Trade.

\* \* \*

Effective 15 November 1983, Janusz Slawinski, born 3 January 1929 in Radzyn Podlaski, was appointed economic attache in the Commercial Counsellor's Office of the Embassy of the Polish People's Republic in Budapest.

He is a graduate of the Main Office of Planning and Statistics. He began his professional career in 1951 and has been employed in the office of foreign trade since 1952. His former position was department chief in the Programming and Planning Department of the Ministry of Foreign Trade.

\* \* \*

Effective 15 November 1983, Stanislaw Wajchert, born 10 August 1923 in Sierpc, was appointed economic attache in the Embassy of the Polish People's Republic in Bucharest.

He is a graduate of the Main School for the Foreign Service and began his professional career in 1945. He has been employed in the foreign-trade office since 1950. His former position was main specialist in the Trade Policy Department II in the Ministry of Foreign Trade.

\* \* \*

Effective 15 November 1983, Henryk Jedrzejewski, born 14 July 1926 in Kruszewica, was appointed commercial attache in the Embassy of the Polish People's Republic in Stockholm.

He is a graduate of the Trade Academy in Poznan and began his professional career in 1948. He has been employed in the office of foreign trade since 1951. He was employed last as deputy office director in PHZ AGROMET-MOTOIMPORT [Agricultural Machinery and Equipment].

Effective 15 November 1983, Marian Glanc, born 2 February 1930 in Jamielnik, was appointed commercial attache in the Commercial Counsellors Office in the Embassy of the Polish People's Republic in Bonn with headquarters in Cologne.

He is a graduate of Warsaw University. He began his professional career in 1953 and has been employed in the office of foreign trade since 1960. His former position was office director in ANIMEX Export-Import Co. [Animal, Meat and Poultry Products].

\* \* \*

Effective 15 November 1983, Andrzej Gieraltowski, born 14 September 1943 in Zyrardow, was appointed commercial counsellor in the Embassy of the Polish People's Republic in Iraq.

He is a graduate of the Main Office of Planning and Statistics. He began his professional career in 1966 and has been employed in the office of foreign trade since that time. His former position was office director in PHZ POLIMEX-CEKOP [Industrial Equipment and Machinery].

\* \* \*

Effective 15 November 1983, Ryszard Ramos, born 8 January 1937 in Sarny, USSR, was appointed director of the Non-Coal Mining and Various Facilities Office in CHZ CENTROZAP [Mining and Metallurgy Machinery and Equipment].

He is a graduate of the Higher School of Economics and began his professional career in the office of foreign trade in 1960. His former position was deputy director of the above-mentioned office.

#### Foreign Trade, Diplomatic Personnel

Warsaw RYNKI ZAGRANICZNE in Polish 25, 28 Feb 84 p 8

[Text] Effective 19 November 1984, Piotr Wiese, born 11 August 1949 in Bydgoszcz, was appointed acting director of the Ornamental-Silk Products Export and Import Office in TEXTILIMPEX Co [Textile Products and Raw Materials].

He is a graduate of Lodz University. He began his professional career in the office of foreign trade in 1972. His former position was deputy director of the above-mentioned office.

\* \* \*

Effective 19 November 1983, Eugeniusz Cielecki, born 1 January 1939 in Lodz, was appointed deputy director of the Ornamental-Silk Products Export and Import Office in TEXTILIMPEX Co.

He is a graduate of Lodz University. He began his professional career in 1958 and has been employed in the office of foreign trade since 1961. His former position was department manager in TEXTILIMPEX.

\* \* \*

Effective 21 November 1983, Jerzy Zaremba, born 20 April 1929 in Lodz, was appointed agency director for PHZ POL-MOT [Motor Vehicles and Automotive Equipment] in Prague.

He attended the Higher School of Social Sciences and began his professional career in 1943. He has been employed in the office of foreign trade since 1971. His former position was assistant office director in PHZ POL-MOT.

\* \* \*

Effective 1 December 1983, Adam Detyna, born 19 February 1929 in Stanislawow, USSR, was appointed commercial counsellor in the Embassy of the Polish People's Republic in Nicosia.

He is a graduate of the State Institute for International Relations in Moscow. He has been employed in the office of foreign trade since 1952 and his last position was director of the Department of Organization and Licensing in the Ministry of Foreign Trade. He began his professional career in 1948.

\* \* \*

Effective 14 December 1983, Jan Kolasa, born 14 December 1922 in Ocin, was appointed deputy director of the Raw Materials Import and Export Office, TEXTILIMPEX Co.

He graduated from Lodz University and began his professional career in 1940. He has been employed in the office of foreign trade since 12 February 1947. His former position was director of TEXTILIMPEX Co in Sydney, Australia.

\* \* \*

Effective 15 December 1983, Andrzej Rucinski, born 7 November 1938 in Warsaw, was appointed commercial attache in the Commercial Counsellors Office in the Embassy of the Polish People's Republic in Kuala Lumpur.

He graduated from the Main School of Planning and Statistics and began his professional career in 1958. His last position was assistant department manager in PHZ UNIVERSAL [Durable Consumer Goods].

\* \* \*

Effective 15 December 1983, Kajetan Zielinski, born 23 September 1928 in Warsaw, was appointed deputy director general of ANIMEX Export-Import Co.

He is a graduate of the Main School of Planning and Statistics and began his professional career in 1948. He has been employed in the office of foreign trade since that time. His former position was director of the Meat Products Office of ANIMEX Export-Import Co.

\* \* \*

Effective 15 December 1983, Adam Bachowski, born 16 September 1948 in Kamienica Polska, was appointed deputy director general-economics director in ANIMEX Export-Import Co.

He began his professional career in the office of foreign trade in 1971. His former position was director of the economics office in ANIMEX.

#### Foreign Trade Assignments

Warsaw RYNKI ZAGRANICZNE in Polish 6 Mar 84 p 8

[Text] Effective 1 January 1984, Edmund Kielczewski, born 8 December 1930 in Czarnoglow, was appointed director of the Control Department in the Ministry of Foreign Trade.

He is a graduate of Warsaw University and the Main School of Planning and Statistics. He has been employed in the office of foreign trade since 1955. His former position was deputy director of Trade Policy Department II in the Ministry of Foreign Trade. He began his professional career in 1952.

\* \* \*

Effective 1 January 1984, Kazimierz Bracki, born 29 September 1925 in Inowrocław, was appointed director general of PHZ POLCOOP Central Union of Agricultural Cooperatives Peasant Self-Help.

He is a graduate of the Higher School of Economics in Krakow and began his professional career in 1951. He has been employed in the office of foreign trade since 1956. His former position was director of AGROPOL Co in Hamburg.

\* \* \*

Effective 1 January 1984, Jerzy Surowiecki, born 14 January 1934 in Dabrowka, was appointed assistant office director of CIECH-POLFA in CHZ CIECH [Chemicals and Chemical Products].

He is a graduate of the Medical Academy in Warsaw and began his professional career in 1957. He has been employed in the office of foreign trade since 1978. His former position was director general of POLFA-Nigeria Ltd in Nigeria.

\* \* \*

Effective 1 January 1984, Marian Forys, born 30 July 1951 in Czyzyki, was appointed acting deputy economics director in PHZ STALEXPORT [Iron and Steel Products].

He is a graduate of the Higher School of Economics in Katowice and began his professional career in 1973. He has been employed in the office of foreign trade since that time. His former position was main specialist in PHZ STALEXPORT.

\* \* \*

Effective 1 January 1984, Wlodimierz Galicki, born 22 February 1926 in Wielick, was appointed director of the Small Leather Goods Bureau in SPHZ COOPEXIM.

He is a graduate of the Higher School of Economics and began his professional career in 1945. He has been employed in the office of foreign trade since 1962. His last position was main specialist at SPHZ COOPEXIM.

\* \* \*

Effective 1 January 1984, Andrzej Nastaj, born 15 April 1942 in Rzeszow, was appointed director of the Miscellaneous Articles Office in SPHZ COOPEXIM.

He is a graduate of the Main School of Planning and Statistics and began his professional career in 1967. He has been employed in the office of foreign trade since 1967. His former position was department manager in COOPEXIM.

Embassy, Foreign Trade Personnel

Warsaw RYNKI ZAGRANICZNE in Polish 8 Mar 84 p 8

[Text] Effective 5 January 1984, Jerzy Mitoraj, born 16 September 1932 in Rowne, was appointed economic counsellor in the Commercial Counsellors Office of the Polish People's Republic Embassy in London.

He is a graduate of the Main School of Planning and Statistics and the Czestochowa Polytechnic. He began his professional career in 1955 and has been employed in the office of foreign trade since 1958. He was formerly director of Trade Policy Department II in the Ministry of Foreign Trade.

\* \* \*

Effective 9 January 1984, Boleslaw Wierzchon, born 29 October 1932 in Wielatki, was appointed director of the Promotion and Services Coordination Bureau in the Ministry of Foreign Trade.

He is a graduate of the Foreign Trade Institute in Moscow. His work began in 1956 in the office of foreign trade. He was formerly commercial counsellor in the Embassy of the Polish People's Republic in Caracas.

\* \* \*

Effective 15 January 1984, Ryszard Tutak, born 16 March 1930 in Lublin, was appointed commercial counsellor in the Embassy of the Polish People's Republic in Athens.

He is a graduate of the Warsaw Polytechnic and began his professional career in 1947. He has been employed in the office of foreign trade since 1956. He was formerly deputy director, Trade Policy Department I, Ministry of Foreign Trade.

9295

CSO: 2600/848

SPECIALIST DISCUSSES WATER SHORTAGE IN AGRICULTURE

Warsaw RZECZPOSPOLITA in Polish 24 Feb 84 p 3

[Interview with Prof Henryk Okruszko, director of the Plant for the Natural Bases of Reclamation at the Institute of Reclamation and Use of Pasture Lands, by Edmund Szot; date and location of interview not given]

[Text] [Question] The signals we receive from farmers tell us that currently the major problem of rural Poland is the water shortage. Was there more water at one time?

[Answer] We have not had the kind of drought that now exists for a long time. The level of subterranean waters was reduced by nearly 1.5 meters over the past 2 years. The wells farmers build are rarely constructed for a greater water depth.

[Question] It is frightening to consider what will happen if this drought continues. Water is the basic production element in agriculture!

[Answer] It is impossible to give a reliable answer to a question about future weather conditions. However, the water shortage can have a dual effect: it can reduce crop yields and can restrict livestock production. Milk volume depends directly upon how much water a cow drinks. This is especially critical for cattle with high milk yields.

[Question] Do agricultural results in other countries also depend to such a great degree upon the amount of rainfall?

[Answer] All agricultural results depend upon this. The only difference is the degree of dependence. Poland's situation is unfavorable in this regard. Water supplies in water-courses are considerably lower in Poland than in neighboring countries, and while the volume of rainfall is similar, our environment does not have sufficient storage capacity, both over the course of the year and during the crop growing season. We are situated on glacial sands that absorb water weakly. Sixty percent of our soils are light soils that have little retentive capacity. The deforestation of the country also hastens the outflow of water. During the summer, the evaporation of water and its consumption by crops is greater than precipitation and farming should make use of winter reserves at that time. Unfortunately, we have few places to store them.

[Question] A few years ago, a program was developed for building small storage reservoirs. The implementation of this program, however, has not been very successful...

[Answer] It is no wonder, since these are costly investments, unless one succeeds somewhere in taking advantage of the relief of the land surface. I should also point out that it is difficult to collect water for farming because it must be distributed over a large area. The hitch here is how to exchange surface runoff for earth flows. The accumulation of water for agriculture also occupies large areas. Thus, in our situation, it seems more advisable to make revisions in water management in water-courses.

[Question] Of what would this consist?

[Answer] Our rivers have a tendency to cut into the land, to deepen the riverbeds. This dries up the entire river valley and hastens the outflow. Thus, we must restore water-courses to a state that would foster water storage. Formerly, weir mills played a positive role here. On the whole, we need a more ecological, less technical approach to these matters.

[Question] For the most part, the reverse is true. Reclamation experts are also accused of causing soil droughts by their work.

[Answer] When projections of reclamation systems are made, the water balance is a basic consideration. Ideally, every reclamation system ensures not only drainage but also irrigation. In practice, only the first works, for it requires only gravity. Irrigation does not work and it is true that in a critical situation, such a reclamation system only does harm.

[Question] Are there no bad plans?

[Answer] Of course, this is possible, but it is an exception. There can also be errors in execution, but the basic cause of the insufficient use of reclamation systems is a lack of utilization.

[Question] It is easier to build something than to use it...

[Answer] This does not refer to reclamation alone. Waste treatment plants built at enormous expense are not in use because operations services are poorly paid, for example. Investments priorities affect the entire economy as well.

[Question] But in the case of reclamation equipment, there are maintenance enterprises...

[Answer] The name itself is a mistake. A reclamation system should not be maintained, but used. An enterprise that is paid for maintenance will even take the system out of service to maintain it.

[Question] Do water companies also operate poorly?

[Answer] Some work very well, especially the ones that have a 100-year tradition. But with regard to companies, much has been lost in the various ill-considered reorganizations. It is also forgotten that reclamation, as well as being a part of water management, is also a part of the system of the agricultural management of lands. Like fertilizers, it is a production element. If the tremendous amounts of money poured into the reclamation of pasture lands are to be profitable, the meadower will have a great deal of input. Meanwhile, specialists in the cultivation of meadows generally do not exist. Only now are attempts being made to restore this service, but this will take some time.

[Question] Let us return to the effects of drought...

[Answer] The reclamation system that has been properly designed, executed and utilized should eliminate drought. But if a system does not work, there is the danger over the short term that yields will drop and, over the long term, that soil properties will become depleted in the area of the regulation of atmospheric-water ratios. In extreme cases, organic soils become combustible material. This happened recently near Kamiensk in the vicinity of a high-speed highway. Such fires are difficult to put out. These are the ultimate consequences of a lack of irrigation systems.

[Question] Let us summarize: Poland's water resources are poor, the storage potential of the environment is minimal, there is a shortage of reservoirs and water supply systems, the extent of rainfall is insignificant and the drought continues. One cannot blame farmers for demanding water and reclamation.

[Answer] The experts' report of the Polish Academy of Sciences Reclamation Committee, "Report on the State of Reclamation and Directions for Action," tells us what to do. The first version of this report is already outdated, since we did not anticipate our present economic situation. Now we are completing the second version of the experts' report. In the near future, it will be submitted to the appropriate authorities, i.e., the Planning Commission of the Council of Ministers and the Ministry of Agriculture. What use they will make of this report is another matter.

8536  
CSO: 2600/855

YUGOSLAVIA

DATA ON COAL PRODUCTION, 1981-1983; OUTLOOK FOR 1984

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 22 Mar 84 p 5

[Excerpts] Although last year's coal production increased by 7 percent, it was still 2 percent below the amount planned for in the energy balance. High production had a positive effect on supplies to thermoelectric power plants. This year, production is to expand by 7.9 percent, assuring 10 percent higher deliveries to thermoelectric power plants, while industry and general consumers will receive 5-6 percent more than last year. Imports of 451,000 tons are anticipated for broad and general consumption. This year we should anticipate a better supply of thermoelectric power plants at the expense of broad and general consumption.

Coal production in all 3 years of the current 5-year plan has been on the rise. In 1981, total production amounted to 51,923,000 tons, while the following year it reached 54,587,000. Last year it reached 58,584,000 tons, or 7 percent more than the preceding year. These production figures still fell 2 percent short of the total included in the energy balance plan. Calculated at an average of 4,000 calories, last year's production amounted to 39,993,000 tons, compared to 37,400,000 tons for 1982 and 35,924,000 tons of energy-adjusted coal production for 1981.

Growth in Production of All Types of Coal

A positive trend is seen in the fact that production of all types of coal increased. Lignite volume showed the largest growth, from 43,454,000 tons in 1982 to 47,889,000 tons in 1983 (compared to 40,958,000 tons in 1981). Brown coal production for 1983 was 11,303,000 tons, compared to 10,744,000 tons in 1982 and but 1,581,000 tons in 1981. The slowest growth came in production of bituminous coal: last year's production reached 392,000 tons, compared to 389,000 tons in both 1982 and 1981.

Coal processing also showed an upward trend. During 1983 3,440,000 tons were produced, for an increase of 24 percent over 1982, when 2,779,000 tons of coal products were produced. The figure for 1981 was 2,693,000 tons. The growth rate last year was high and was one of the best results in Yugoslav industry, and it is particularly meaningful that it was achieved under

very unfavorable economic operating conditions, by exceptional efforts of the miners and supportive measures of current economic policy.

According to the 1984 energy balance, total coal production should grow to 64 million tons, or by about 8 percent compared to last year's result. That continuing production growth should provide nearly 10 percent more coal to thermoelectric power plants compared to last year, while deliveries to industry and for general consumption should grow by 5-6 percent. As usual, the lion's share will be delivered to the largest consumer, the associated electric power industry, which will receive 48.1 million tons, and to industry, which will get 7.4 million tons. The Yugoslav railroad system will receive nearly 200,000 tons, while about 450,000 tons of pulverized coal will be exported. Increased deliveries should have a positive impact on both thermoelectric power plants and industry in general. It is projected that all their needs will be satisfied, while the matter of complete supplies for broad and general consumption will continue to be with us. In order to improve supplies for general consumers, broad consumption and special industrial uses, imports of 451,000 tons are planned.

Certainly the status of reserves will be reflected in the continuity of supplies on the domestic market. Although large quantities are not always in question, there is a positive tendency for reserves to increase. Last year production reserves had an index of 162 relative to 1982, and the 1982 reserves were 132 percent of those in 1981. Taking 1982 as the base, the reserves in 1981 had an index of 76, and those in 1980, of 52.

#### Investment Policy Slow To Be Implemented

The first months this year show favorable trends in coal production, but in order for this ambitious plan to be realized, proper legal measures must be passed and activities put into effect that will have a stimulating effect on production growth and realization of planned production. Among other things, more rigorous attention must be paid to implementing the investments plan, for energy needs constitute a priority activity.

It cannot be said that investments are being made according to the plan schedule. During the first 3 years of this 5-year plan, only about one third of the planned amount of investments has been made in mine development. Consequently, the plan of 64,000,000 tons will rely strictly on old facilities. It would not be inappropriate to note here that last month, the period for fulfilling obligations toward coal mining operations ended for commercial banks, self-management interest communities and other partners.

Considering needs for coordinating supply and demand and assuring energy supply as petroleum and derivative imports are being reduced and electric power plant capacities are being restricted, it becomes clear that the shortest and surest way to provide needed power is through accelerated investments in coal mines. Specifically, we must keep in mind that without appropriate investments, it is impossible to reach a production total of 84 million tons in the last year of the current 5-year plan period. To make up for shortfalls in the first years of this 5-year plan and begin yet this year to get into

step with the plan targets and assure production continuity in 1985, this year the investments in coal production must reach 58 billion.

At the General Mining Association, an action and measure plan has been prepared. It is essential to provide 275 million dinars for undertaking and guaranteeing obligations for 1983 and 1984 in convertible foreign exchange areas. Development also depends on sufficient credits for acquiring domestic equipment and machines. This is a matter of credit purchase of equipment for pit and open strip mining with favorable financing conditions. To the highest degree, the readiness, capability and agreement of commercial banks will determine whether Yugoslav machinebuilding enterprises can provide the planned 41 percent of equipment for coal mining.

#### Plans Do Not Rely Only on Miners' Readiness

Probably it will be a long time until we can talk of production of lignite, brown and bituminous coal that will satisfy the needs of all categories of consumers. Certainly it is true that the last month of 1983 saw record production of coal, 5,664,323 tons. The miners had never dug out that much coal in one month before. This high achievement came at a time when practically the entire country had fallen into semidarkness, and it contributed greatly to avoiding an even more serious energy situation and, especially, even more uncertain supplies of electrical power. The thermoelectric power plants had sufficient fuel, and not one stopped for even a moment because of a coal shortage.

There were optimists who thought that records would follow one after the other every month, regardless of the approach of winter, when it is not easy to work in open mines, particularly during windstorms, snowstorms and extreme cold. The seriousness with which the mines regarded the momentary electrical power situation is evidenced by the fact that 5,303,014 tons were produced in the first month of 1984. The record was not beaten, but a very favorable balance was reached. If production were to continue that way every successive month, this year's production target of 64 million tons would easily be met.

#### An Ascending Line

According to data of the Mining Institute in Belgrade, most Yugoslav coal mines recorded increased production last year compared with 1982. The pattern of production for all types of coal was as follows:

TOTAL PRODUCTION* (in tons)	<u>1982</u>	<u>1983</u>
ALL COAL	54,587,000	59,315,000
Of the total:		
bituminous coal	389,000	396,000
brown coal	10,744,000	11,306,000
lignite	43,454,000	47,613,000
BITUMINOUS COAL MINES		
Rasa	247,000	260,000
Ibarski mines	104,000	103,000
Vrska:Cuka	37,000	34,000

BROWN COAL MINES

Banovici	2,393,000	2,378,000
Kakanj	1,530,000	1,751,000
Durdevic	1,483,000	1,546,000
"Edvard Kardelj" Mining and Energy Combine:		
Tran-Sava coal mines	1,401,000	1,533,000
Senovo	121,000	120,000
Kanizarica	99,000	121,000
Lasko	29,000	34,000
Resava-Morava Basin	374,000	384,000
Bogovina	211,000	182,000
Aleksinac	162,000	39,000
Soko	145,000	171,000
Jasenovac	23,000	36,000
Zenica	873,000	1,020,000
Breza	674,000	768,000
Ugljevik	403,000	289,000
Mostar	244,000	270,000
Kamengrad	265,000	347,000
Miljevina	220,000	196,000
Ivangrad	61,000	84,000
Tusnica	32,000	36,000

LIGNITE MINES

Kolubara-Barosevac	15,776,000	14,992,000
Kolubara-Tamnava	3,882,000	5,556,000
Kosovo:		
crude coal	6,620,000	7,010,000
dried coal	307,000	316,000
FLL Mining and Energy Combine, Titovo Velenje	5,005,000	5,027,000
Dobrnja:		
Lukavac	3,106,000	3,241,000
Kostolac	2,697,000	2,965,000
Kreka	2,475,000	2,480,000
Pljevlja:		
Potrlica	1,132,000	1,175,000
Borovica	462,000	1,004,000
Oslomej	1,018,000	838,000
Gracanica	402,000	478,000
Suvodol	324,000	1,406,000
Stanari	222,000	293,000
Gacko	122,000	867,000
Stavalj	82,000	67,000
Tusnica	72,000	75,000
Lubnica	69,000	70,000
Muhader:		
Babus	39,000	38,000
Despotovac	24,000	27,000
Bajovac (Kraljevo)	2,000	5,000

\*There is a difference between official data of the Federal Statistical Office and the Mining Institute.

12131

CSO: 2800/275

YUGOSLAVIA

BRIEFS

UNEMPLOYMENT IN KOSOVO--Pristina, 7 Apr (TANJUG)--At its session today chaired by Ilijaz Kurtesi, the Provincial Committee Presidium of the LC of Kosovo discussed unemployment in the province. It noted that good results have been achieved in this field, although they are not quite in accordance with the needs and opportunities. Despite the results achieved, the problem of unemployment is being more sharply expressed day by day. Currently some 91,000 people are looking for a job and the opportunities for solving this problem are restricted. [Summary] [Belgrade POLITIKA in Serbo-Croatian 8 Apr 84 p 6 AU]

KOSOVO ECONOMY'S LOSSES--Pristina, 1 Apr (TANJUG)--The concluding accounts of the Social Accounting Service show that 137 out of 775 Kosovo basic organizations of associated labor incurred losses in 1983 which amount to 4.57 billion dinars--19 percent more than in 1982. However, the proportion of losses to income in the Kosovo economy has been reduced from 11.2 percent in 1982 to 9.2 percent in 1983. Most of the organizations that incurred losses belong to industry, mining, and construction; 15 of them are organizations producing construction material and 21 are construction organizations, including the Ramiz Sadiku Combine, which had the highest losses among them. [Summary] [Belgrade BORBA in Serbo-Croatian 2 Apr 84 p 1 AU]

ECONOMIC COOPERATION WITH JAPAN--(TANJUG)--The third session of the Yugoslav-Japanese Commission for Economic Cooperation has ended its 2-day session. It was agreed to increase the volume of commodity exchange, to finalize the initiated agreements on joint ventures, to promote cooperation in capital projects in third countries, and to expand financial and tourist cooperation. Japan will grant a credit of \$10 million for importing equipment which will be installed in a joint factory of the Standard Work Organization of Osijek and the Honda firm of Japan for the production of engines and in joint production of the Cotton Combine of Vranje and the Japanese (Kamenatsu Gosho) firm. The document on the session was signed by Janko Smole, member of the Federal Executive Council and president of the Yugoslav part of the Mixed Commission, and T. Nakajima, Japanese deputy foreign minister and president of the Yugoslav part of the Mixed Commission. [Summary] [Belgrade POLITIKA in Serbo-Croatian 11 Apr 84 p 2 AU]

TRADE WITH GDR--(TANJUG)--According to the agreement reached at a session of the Mixed Committee for Economic and Scientific-Technical Cooperation between our country and the GDR, which was recently held in Berlin, this year's commodity

exchange will reach the value of \$1.2 billion. This is 24 percent more than last year when goods worth \$966 million were exchanged. The share of our exports was worth some \$380 million. However, higher forms of economic cooperation are lagging behind a successful trade between the Yugoslav and GDR businessmen. Industrial cooperation and specialization account for only 5 percent of the overall cooperation. For this reason members of the Mixed Committee paid greatest attention to the development of long-term forms of linkage, primarily in the field of machine building, electronics, the chemical industry, the power generation industry, ferrous metallurgy, the shipbuilding industry, and light industry. [Text] [Belgrade POLITIKA in Serbo-Croatian 10 Apr 84 p 4 AU]

VOJVODINA INDUSTRIAL PRODUCTION--Novi Sad, 12 Apr (TANJUG)--In the first quarter of this year, the Vojvodina industrial production increased 2.4 percent compared with the same period last year. Production was increased in 14 industrial branches, and the largest was in the industry of leather footwear and leather products (20.4 percent), in the basic chemical industry (20), the live-stock fodder industry (17.3), the factories processing nonferrous metals (14), and the furniture industry (14 percent). [Summary] [Belgrade BORBA in Serbo-Croatian 13 Apr 84 p 12 AU]

KOSOVO ECONOMIC RESULTS--In the first 3 months of this year, the Kosovo economy has achieved very good results. This is what Sefcet Mustafa, president of the Kosovo Chamber of Economy, has stated on this subject: Export results are very good, especially to the hard currency area. Overall exports have increased by 64 percent. The percentage of exports covered by imports, which was about 41 percent for the hard currency area last year, has now increased to 76 percent. Imports from the clearing account area have decreased by 10 percent and from the hard currency are by as much as 19 percent. [Summary] [AU152035 Belgrade Domestic Service in Serbo-Croatian 1900 GMT 15 Apr 84]

COMMODITY EXCHANGE WITH RSFSR--Belgrade, 16 Apr (TANJUG)--A commodity exchange agreement was signed in Belgrade today between the Serb Cooperative Federation and the RSFSR Union of Consumer Cooperatives. The agreement envisages an increase in the value of commodity exchange, which takes place outside the agreed commodity lists between Yugoslavia and the USSR, from \$1 million [word indistinct] to \$12 million this year. Serb cooperatives and other organizations will export prunes, canned meat, wine, footwear and ready-made clothes. Nitrogen fertilizers, honey, conifer wood logs, old paper and bicycle tires will be imported from the RSFSR. The agreement was signed by Radenko Stanic, president of the Serb Cooperative Federation, and by Yuriy Paramonov, first deputy chairman of the RSFSR Union of Consumer Cooperatives. [Text] [Belgrade TANJUG Domestic Service in Serbo-Croatian 1152 GMT 16 Apr 84 LD]

CSO: 2800/286

END